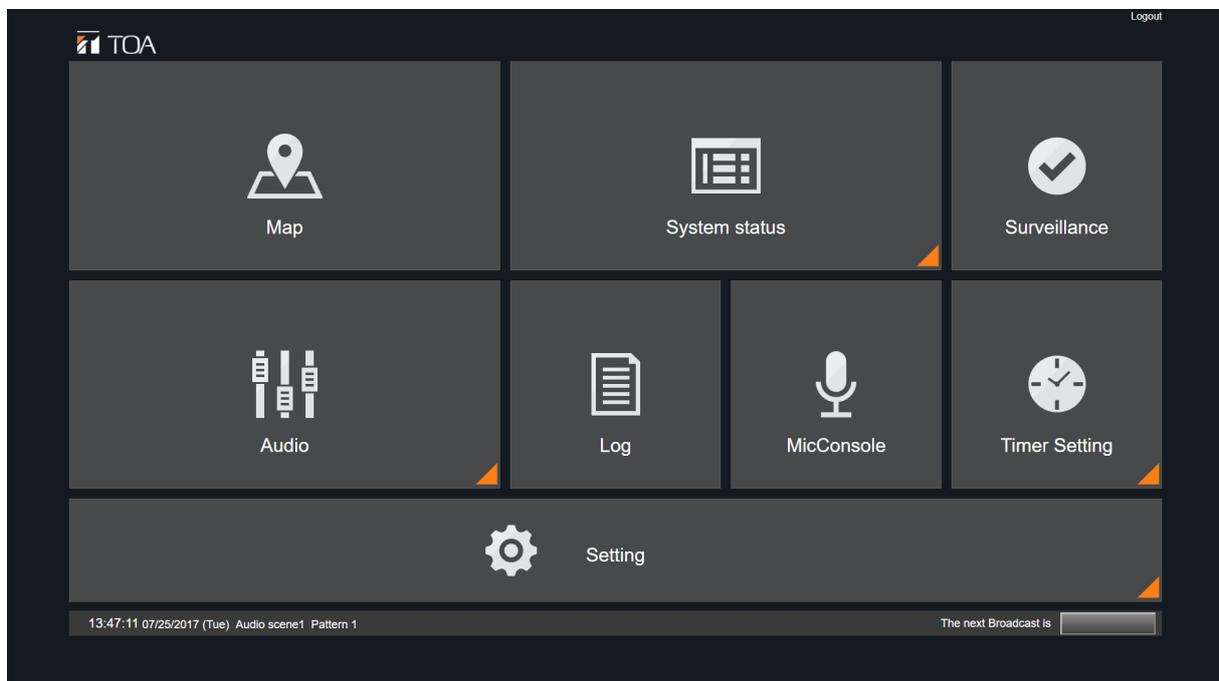




OPERATION INSTRUCTIONS

Network PA System

System Manager(Server Software)	IP-3000SM
Audio Interface Unit	IP-3010AF
Audio Interface Unit	IP-3001AF
Network Module	IP-300XI
IP Remote Microphone	IP-300RM



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

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SOFTWARE LICENSE INFORMATION

Products in the IP-3000 system employ software based on the following open-source software licenses:

- MIT License
- BSD License
- New BSD License
- CC BY 3.0
- Microsoft Public License
- Apache License, Version 2.0

We do not guarantee the function of open-source software itself, but we do guarantee the functionality of such software incorporated within IP-3000 system products according to the provision of each license.

For Specific Open-Source Software Information

Please contact your nearest TOA sales office if you require details about any of the open-source software incorporated within the products in this system. However, we are unable to respond to inquiries about the contents of the open source.

CHAPTER 1: SYSTEM SUMMARY

1. GENERAL DESCRIPTION

- The IP3000 system is a multi-source general broadcast system that utilizes an IP network. It is comprised of a PC server (which hosts the System Manager), an input and output interface, and a remote microphone.
- Web browser-based access to the System Manager PC allows system setting, status monitoring, and device control.

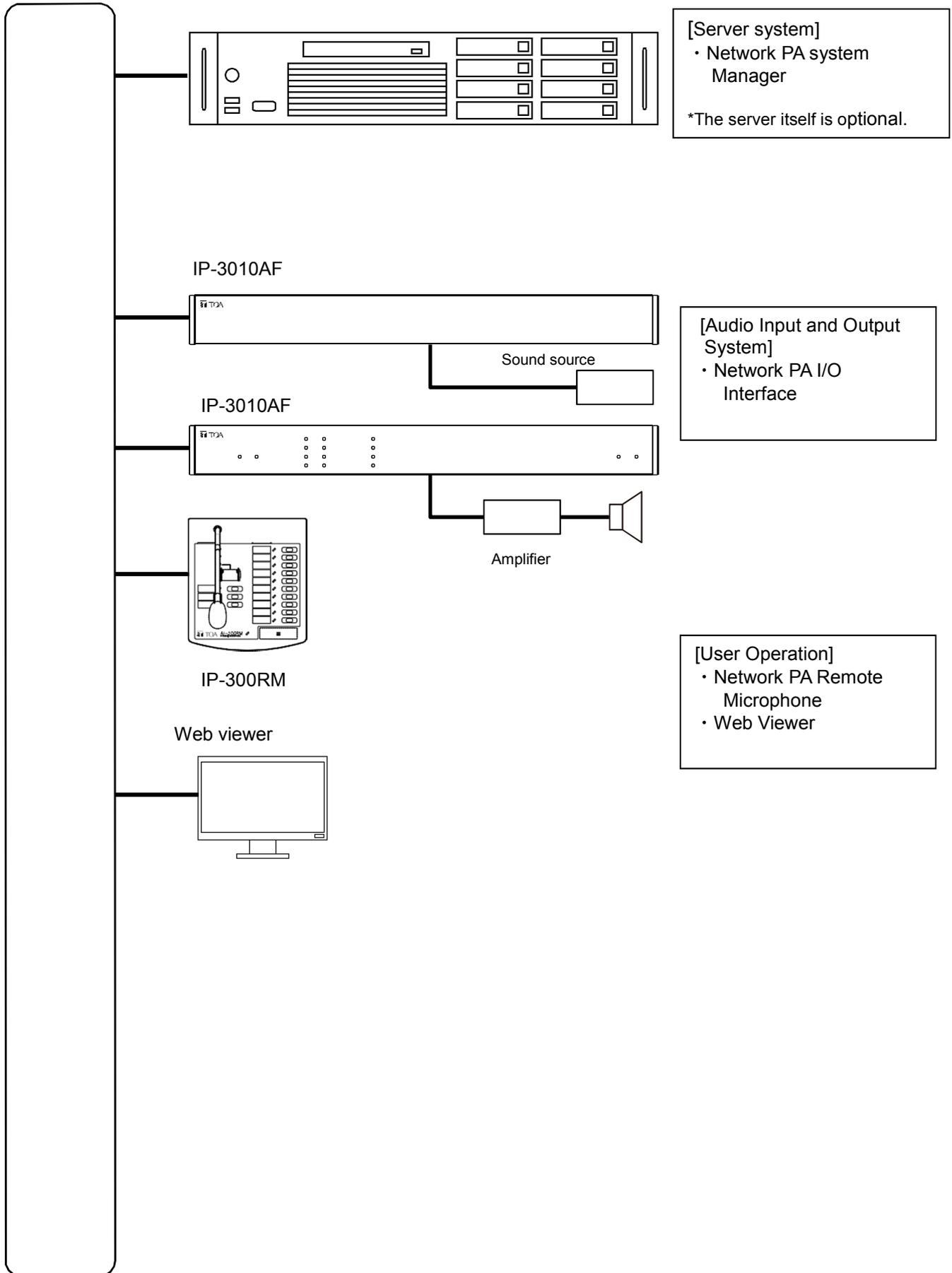
2. FEATURES

- Multi- source general broadcast system that utilizes an IP network.
- Web browser-based GUI eliminates the need to install dedicated or proprietary software applications.

CAUTION

IP-3000 system control functions are implemented over a local area network (LAN) only. Control via the larger Internet is not possible.

3. SYSTEM CONFIGURATION



4. NOMENCLATURE AND FUNCTIONS

IP-3010AF Audio Interface

Front Panel



1. Power Indicator [POWER] (Green)

Lights when the power is turned on.

2. MAC Address

The unit's MAC address (a 12-digit alphanumeric character string separated by hyphens.)

3. LINK/ACT Indicator (Green)

Lights when the unit is connected to a network.
Flashes during data transmission and reception.

4. Status Indicator (Green)

Continuously flashes.
Lights or distinguishes when an error occurs.

5. Input Signal Indicator (Green)

Lights when the signal received at the audio input terminal (15) is adjusted by the input level control (18) and reaches an adequate level for transmission to the network.

6. Input Peak Indicator (Red)

When continuously lit, this LED indicates that the audio signal is distorted. In such cases, set the input level control (18) or audio input level selection switch (17) appropriately.

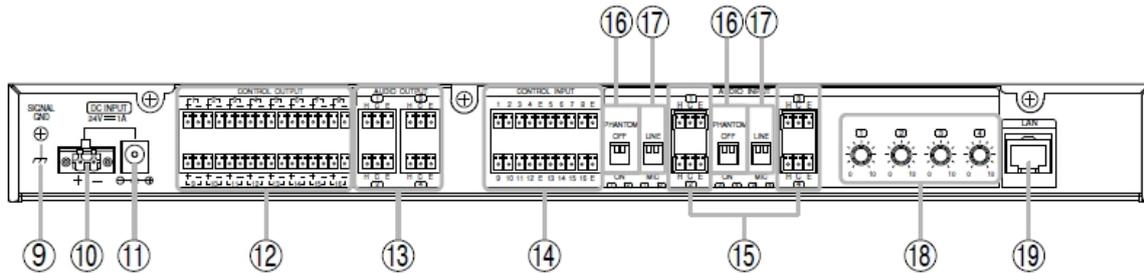
7. Output Indicator (Green)

Lights to indicate that the signal sent out from the audio output terminal (13) is of a sufficient level.

8. Reset Key

Press this key with a pointed object to immediately turn off and restart the IP-3010AF interface.

Rear Panel



9. Functional Ground Terminal [SIGNAL GND]

Be sure to ground this terminal.

NOTE: This terminal is not a safety ground.

10. DC Power Input Terminal [DC INPUT]

Connect the 24V DC power to this terminal.

11. AC Adapter Input Terminal [DC INPUT]

Connect the optional AD-246 AC Adapter to this terminal.

12. Control Output Terminals 1 – 16 [CONTROL OUTPUT]

These terminals are relay contact outputs (dielectric strength: 24V DC, control current: 500 mA).

13. Audio Output Terminals 1 – 4 [AUDIO OUTPUT]

(0 dB, 10k Ω , balanced type)

Output line level audio signals.

H: Hot, C: Cold, E: Ground (shield)

14. Control Input Terminals 1 – 16 [CONTROL INPUT]

These are no-voltage make contact inputs (shorting current: 5mA or less, open-circuit voltage: 24V).

15. Audio Input Terminals 1 – 4 [AUDIO INPUT]

(Terminals set to line level: 0 dB*; terminals set to microphone level: -60 dB*, 2.2k Ω , balanced type)

Receive either microphone level or line level audio signals.

H: Hot, C: Cold, E: Ground (shield)

16. Phantom Power Supply ON/OFF Switches 1 – 4 [PHANTOM]

When supplying phantom power (+17V) to a component connected to the audio input terminal (15), turn this switch ON after first setting the audio input level selection switch (17) to 'MIC.' (Default setting: OFF)

17. Audio Input Level Selection Switch [LINE/MIC]

Set this switch to 'MIC' when a microphone is connected to the audio input terminal, and to 'LINE' when other components are connected.

(Default setting: LINE)

18. Input Level Controls [INPUT VOLUME]

Used to adjust the audio input level.

Clockwise rotation increases the level and counter-clockwise rotation decreases it.

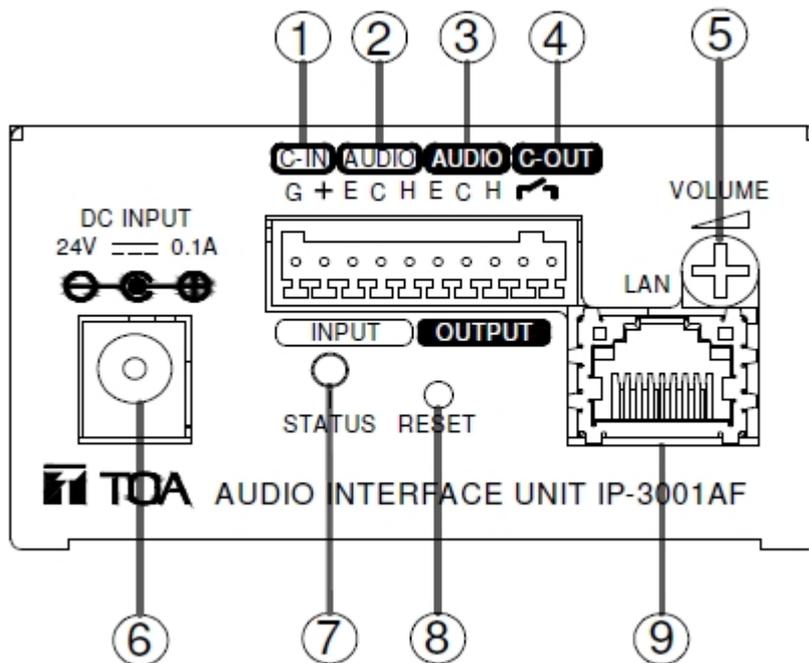
19. Network Connection Port [LAN] (Ethernet RJ-45 jack)

Connects to a 100BASE-T-compatible network.

*0 dB = 1V

IP-3001AF Audio Interface

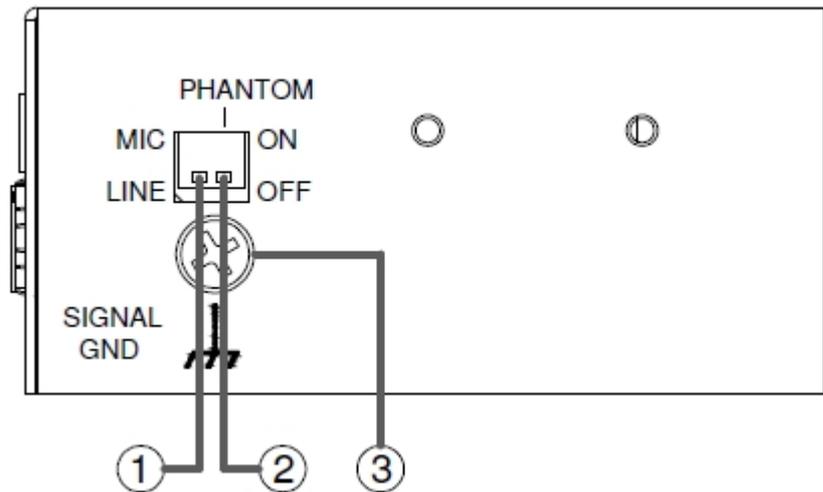
Front Panel



1. Control input [C-IN]
Non-voltage contact input, open voltage: DC24V, short-circuit current: below 5mA.
2. Audio input [AUDIO INPUT]
Electronically balanced input, input impedance 2.2k Ω , MIC -60dB*1/LINE 0dB*1 switchable input selections.
3. Audio output [AUDIO OUTPUT]
Electronically balanced output, 0dB*1, 10k Ω
4. Control output [C-OUT]
Relay control contact output, contact withstand voltage: DC 24V, maximum current: 500mA.
5. Input volume control [VOLUME]
Adjusts gain of the input .
6. Power input [DC INPUT]
Connecting to external DC24V 0.1A power (20.4V~27.6V).
7. Status indicator [STATUS]
The green indicator will flicker regularly when the unit is normal.
8. Reset switch [RESET]
Press this button to reset the unit.
9. Network connection port [LAN]
It can be connected with 100 BASE-T network cables.

*0 dB = 1V

Side Panel



1. Input level switch [MIC/LINE]
MIC -60dB *1/LINE 0dB*1, input impedance 2.2k.

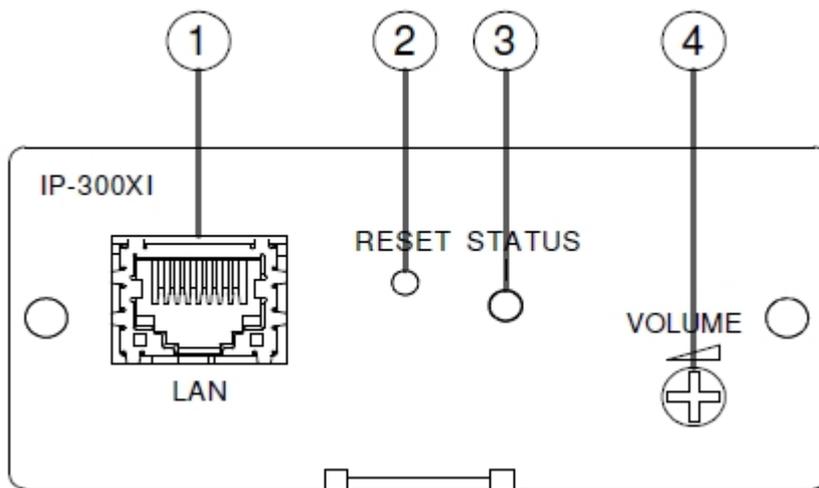
2. Phantom power switch [PHANTOM]
Phantom voltage DC17V.

3. Signal grounding (SIGNAL GND)
Grounding is required.
Note: this is not for protective earth.

Note:
the switches above shall be operated when the unit is disconnected from its power source; or otherwise the horn will sound “bang-bang”.

IP-300XI Network Module

Front Panel



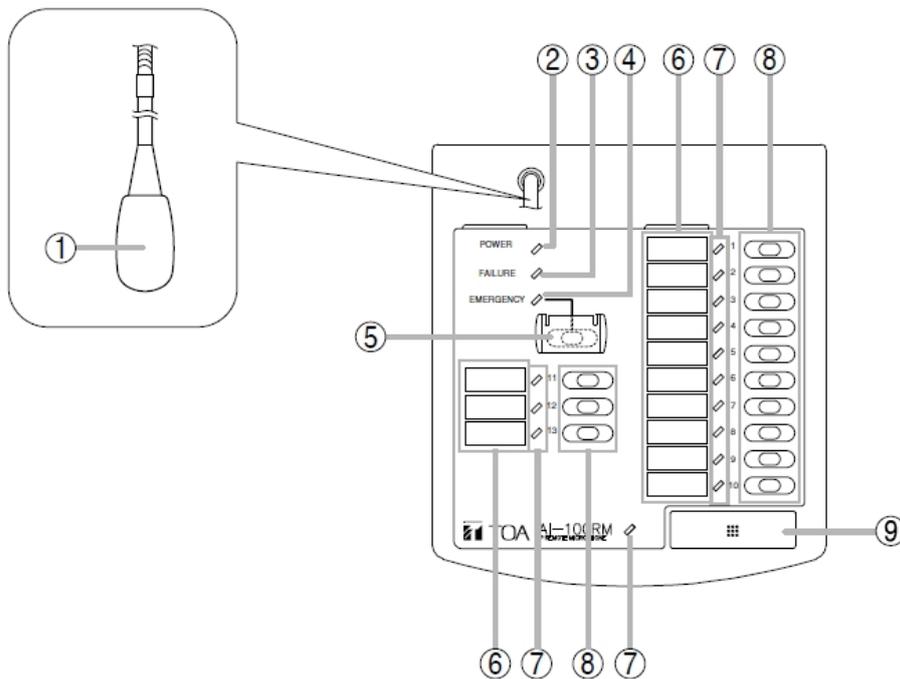
1. Network connection port [LAN]
It can be connected with 100 BASE-T network cables.
2. Reset switch [RESET]
Press this button to reset the module.
3. Status indicator [STATUS]
The green indicator will flicker regularly when the module is normal.
4. Input volume control [VOLUME]
Adjusts gain of the input

Note:

When IP-300XI is installed in a power amplifier, such installation shall be done with the power amplifier disconnected from its power source.

The module shall be used in an environment with the temperature of 0~+40°C and relative humidity of no more than 90% (no dew formation).

IP-300RM IP Remote Microphone Top Panel



1. Microphone

Used for making microphone announcements.

2. Power Indicator [POWER] (Green)

Lights when the power is turned ON.

3. Failure Indicator (Red)

Continuously lights, flashes or distinguishes in interlock with the function operation status set during system settings.

4. Emergency Indicator [EMERGENCY] (Red)

Continuously lights, flashes or distinguishes in interlock with the function operation status set during system settings.

5. Emergency Key (with cover)

Allows execution of the corresponding emergency function set during system settings.

6. Display Label Insertion Part

Allows insertion of the display label.

7. Status Indicators (Green/Orange)

Continuously light, flash or distinguish in interlock with the function operation status set during system settings.

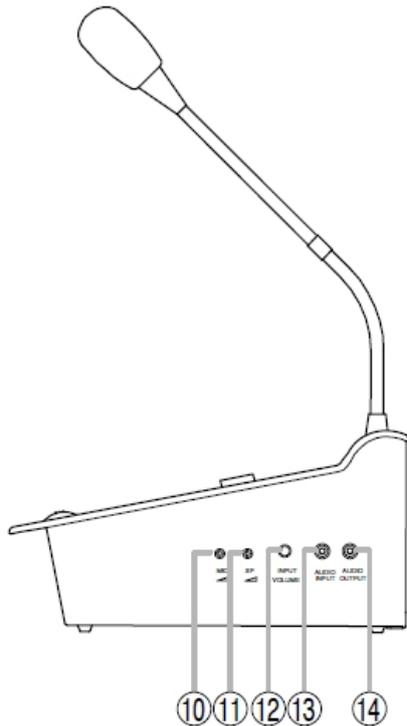
8. Function Keys 1 – 13

Pressing a key allows the execution of the corresponding function assigned to that key during system settings.

9. Talk Key

Used during microphone announcements. Set to either PTT or Lock mode. When in PTT mode, announcements can be initiated only while the key is pressed. When in Lock mode, announcements start when the key is pressed, and are terminated when the key is pressed again.

Side Panel



10. Microphone Input Level Control [MIC]

Adjusts the microphone (1) volume. The volume increases as the control is rotated clockwise, and decreases as the control is rotated counterclockwise.

11. Speaker Output Level Control [SP]

Adjusts the speaker (20) output volume. The volume increases as the control is rotated clockwise, and decreases as the control is rotated counterclockwise.

12. External Input Level Control [INPUT VOLUME]

Adjusts the external input terminal (13) volume. The volume increases as the control is rotated clockwise, and decreases as the control is rotated counterclockwise.

13. External Input Terminal [AUDIO INPUT]

Audio signal from connected external equipment is input at this terminal. (-20 dB*, 10 k Ω , unbalanced, \varnothing 3.5mm stereo mini jack)

The audio signal is mixed in the remote microphone and converted to a monaural signal.

14. External Output Terminal [AUDIO OUTPUT]

Outputs an audio signal to connected external equipment. (0 dB*, 600 Ω , unbalanced, \varnothing 3.5mm stereo mini jack)

The output audio signal is monaural.

*0 dB = 1V

15. Control Input Terminal [CONTROL INPUT]

No-voltage make contact input (short-circuit current: 5 mA or less, open circuit voltage: 24V).

16. Functional Ground Terminal [SIGNAL GND]

Be sure to ground this terminal.

NOTE: This terminal is not a safety ground.

17. Reset Key

Press this key with a pointed object to immediately turn off and restart the IP-300RM interface.

18. AC Adapter Input Terminal [DC POWER IN]

Connect the optional AD-246 AC Adapter to this terminal.

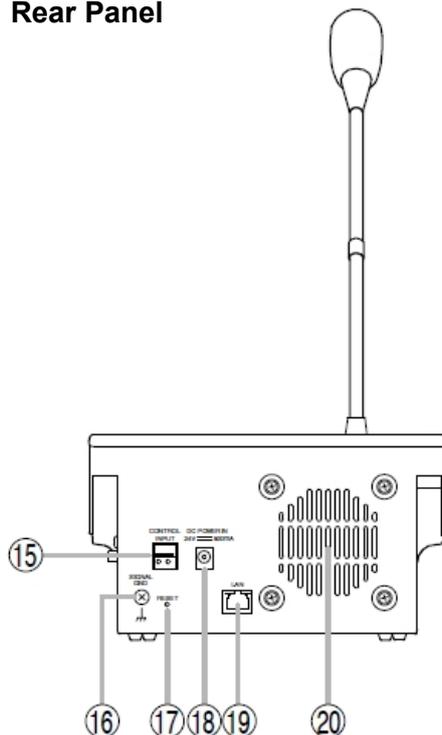
19. Network Connection Port [LAN] (Ethernet RJ-45 jack)

Connects to a 100BASE-TX-compatible network.

20. Speaker

Used for monitoring purposes.

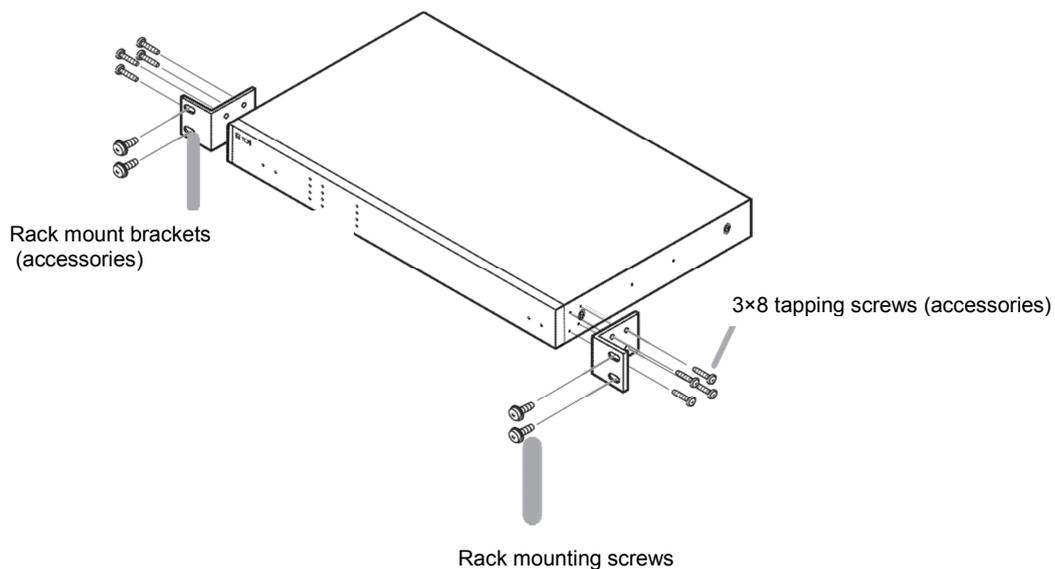
Rear Panel



CHAPTER 2: INSTALLATION AND CONNECTIONS

1. RACK-MOUNTING THE IP-3010AF INTERFACE

[Mounting Method]



1. Attach the rack mount brackets to the interface.
2. Install the interface in a cabinet rack.

[Caution]

The rack mounting screws are not supplied with the interface. Prepare the appropriate screws* separately. Use of incorrect screws could result in fire, damage or personal injury.

*Prepare 5x12 tapping screws with plain washers when mounting in a TOA equipment rack.

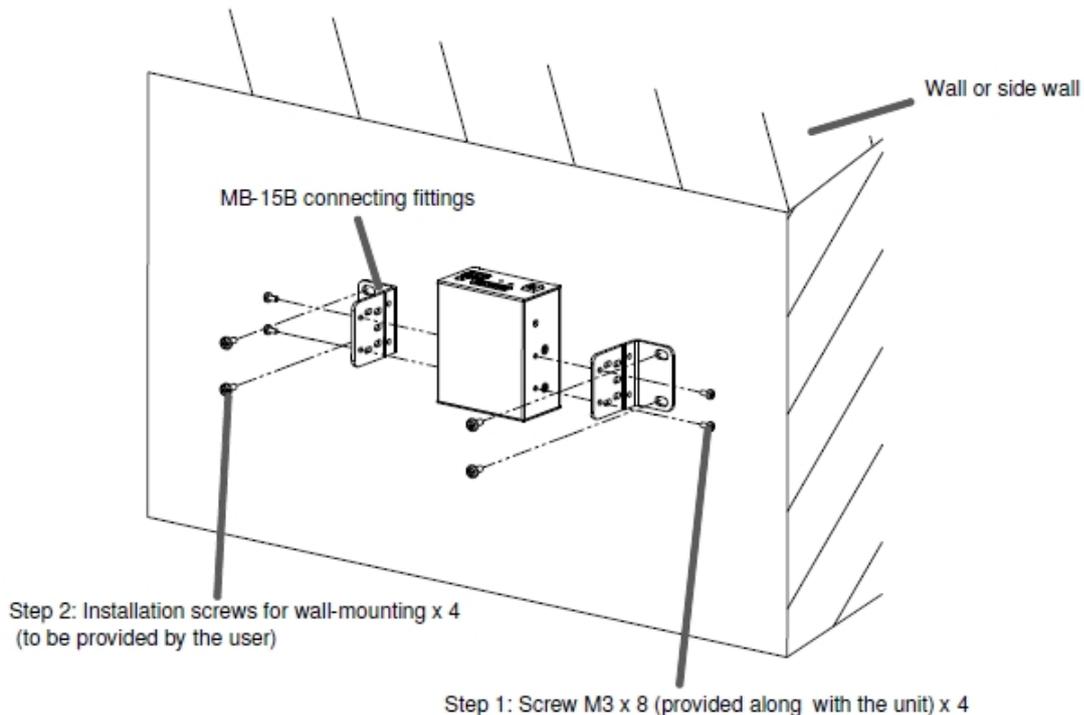
2. INSTALLATION IP-3001AF Interface

Wall mounting

By using additionally procured MB-15B connecting fittings, the unit may be wall-mounted.

Step 1: Use the M3x8 screws provided along with the unit to fix the MB-15B connecting fittings on both sides of the unit.

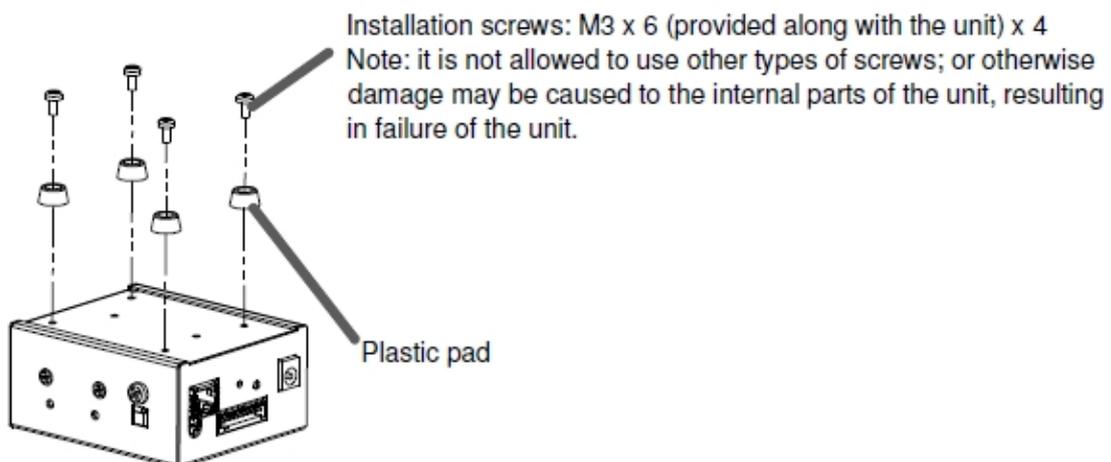
Step 2: Provide installation screws with proper sizes for wall-mounting based on the actual installation environment to fix the unit onto the wall.



Note: it is not allowed to use other types of screws; or otherwise damage may be caused to the internal parts of the unit, resulting in failure of the unit.

Pad installation

When the unit is put on a table for use, the plastic pads can be fixed to the bottom of the unit with the M3x6 screws provided along.

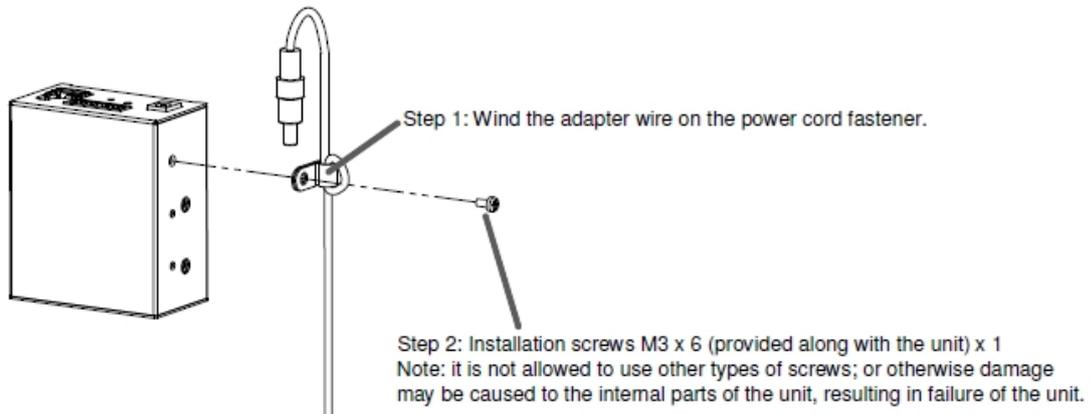


Power cord fastener installation

Use a power cord fastener to prevent fall of the power plug due to gravity of the adapter.

Step 1: Wind the adapter wire on the power cord fastener.

Step 2: Use the M3 x 6 screws provided along with the unit to fix the power cord on the side of the unit.



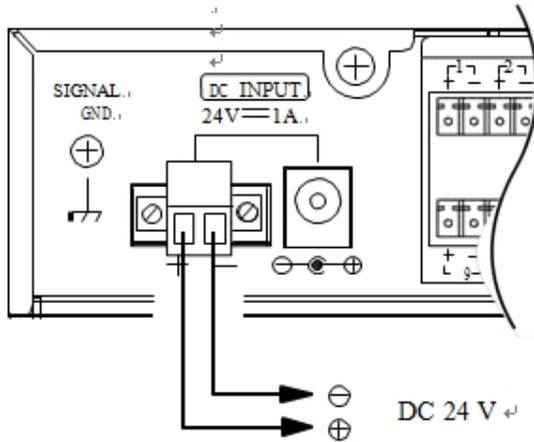
3. CONNECTIONS

IP-3010AF Network PA I/O Interface

Power Connections

[When using the 24V DC power supply]

Connect the 24V DC power supply to the interface's DC power input terminal (DC INPUT).



NOTE:

- Use a DC power supply with a rated output current exceeding 1A.
- The input voltage range of the DC power input terminals is 21.6 ~ 26.4V DC. Inputting a voltage outside this range could lead to malfunctions or failures. For wiring of the connector that connects to the DC power input terminal, please refer to Page 2-6 "Detachable Terminal Plug Connections."
- If power is supplied to both the DC power input terminal and the AC adapter

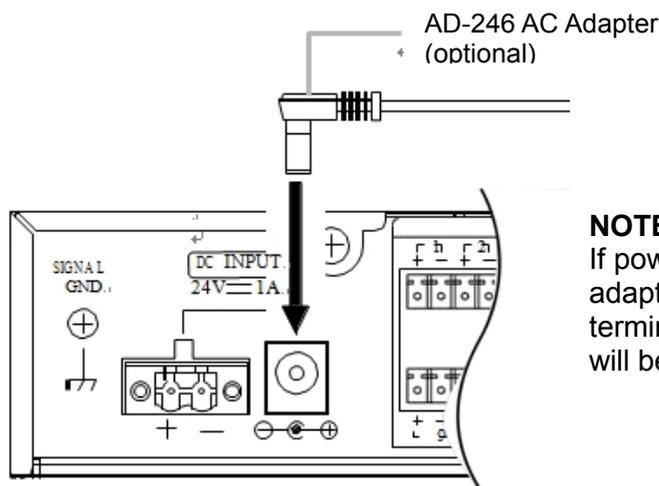
jack, the input with higher voltage will be used.

[When using the optional AD-246 adapter]

[Caution]

When using an AC adapter, use the optional AD-246 Adapter. Use of an AC adapter other than the AD-246 could cause fire or other damage.

Connect the optional AD-246 Adapter to the interface's AC adapter jack.



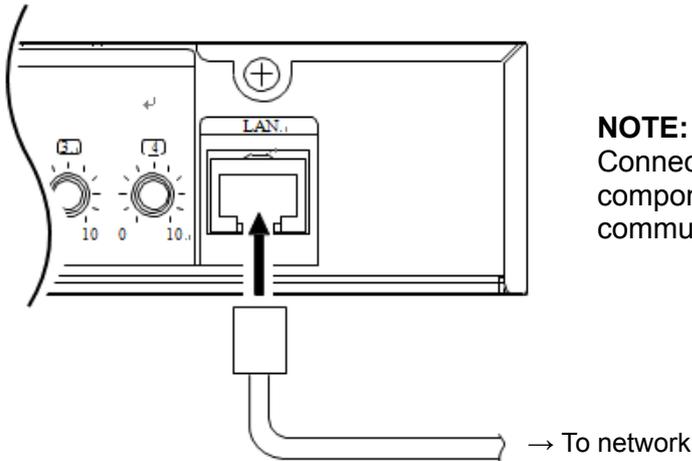
NOTE:

If power is supplied to both the AC adapter jack and the DC power input terminal, the input with higher voltage will be used.

Terminal Connections

Network connections

For this connection, use Category 5 or greater UTP straight cable with an RJ-45 connector.



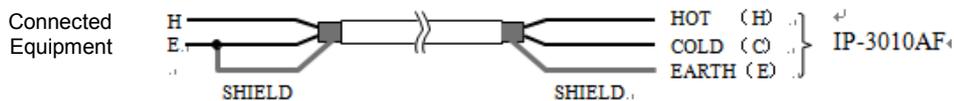
NOTE:

Connect this terminal to a network component capable of full-duplex communication.

Audio I/O terminal connections

For wiring of the connectors attached to the audio I/O terminals, please refer to Page 2-6 “Detachable Terminal Plug Connections.”

If the connected equipment has unbalanced inputs and outputs, make connections as shown in the figure below:

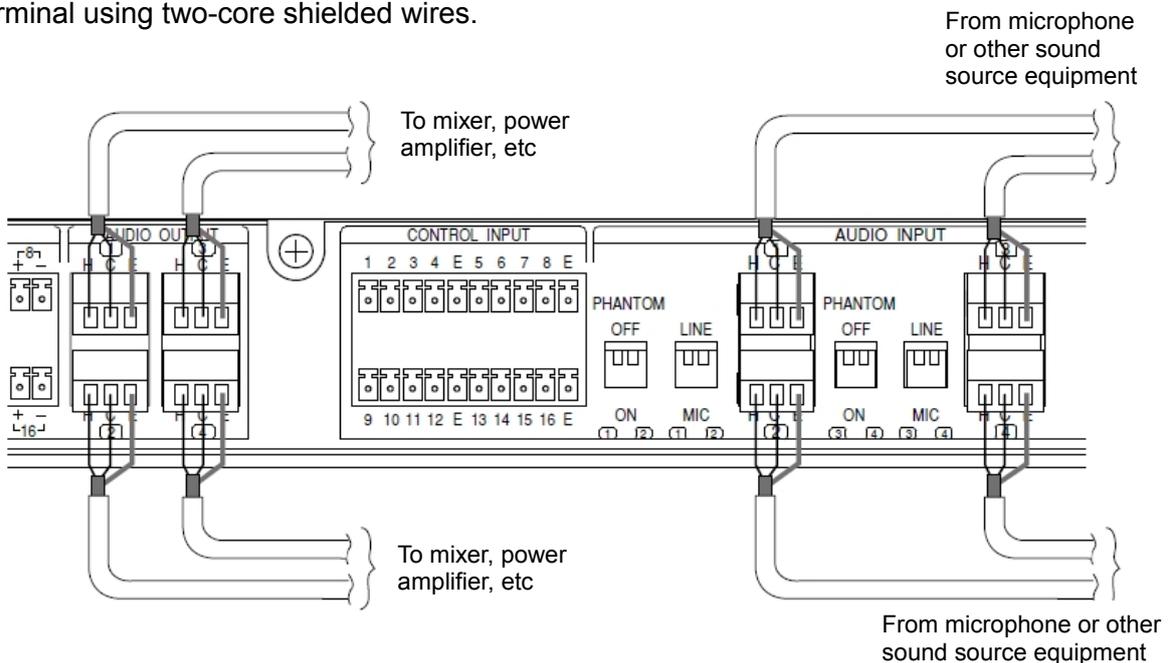


- Audio output terminal connections

Connect a mixer, power amplifier and other components to this terminal using two-core shielded wires.

- Audio input terminal microphone connection

Connect a microphone and other sound source equipment to the audio input terminal using two-core shielded wires.

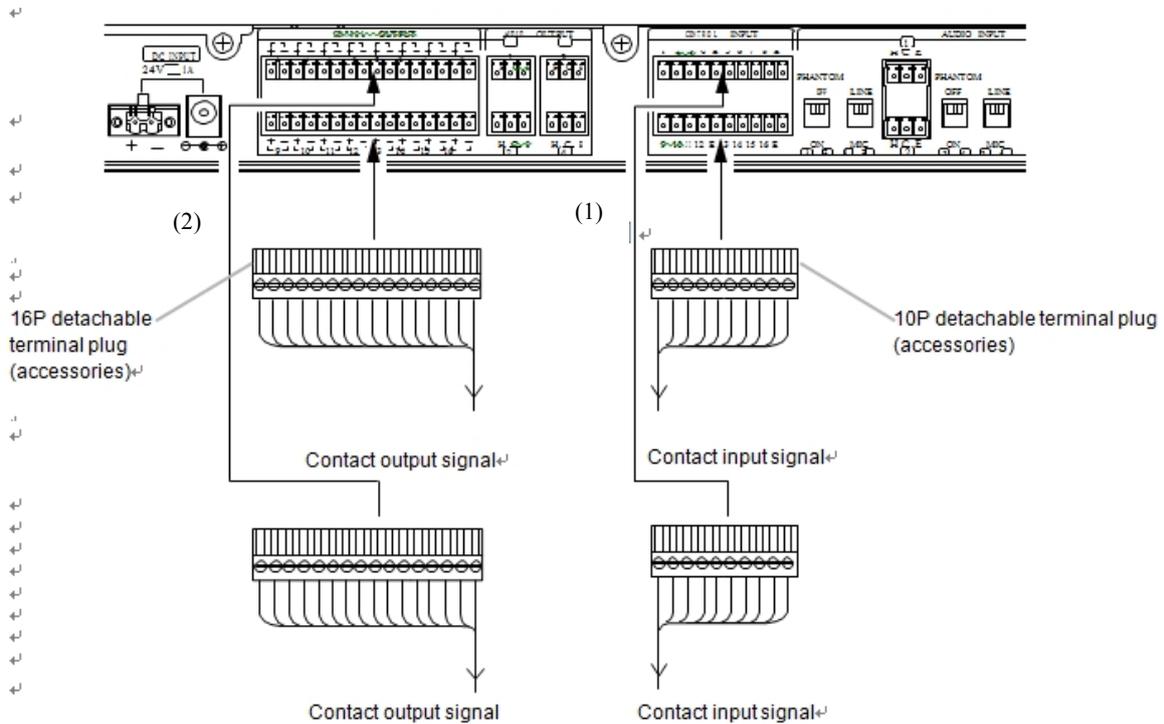


Control I/O terminal connections

Connect the control output terminal of this interface to another interface's control input terminal, and the former's control input terminal to the latter's control output terminal using two control wires for each connection.

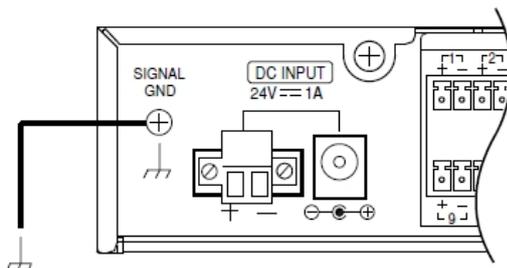
NOTE:

Be sure to connect only the control wires from this interface to the other interface's control input terminals. If wires from both this and other interfaces are connected in parallel to the other interface, this interface could malfunction.



- (1) Contact input terminal connections
 (Refer to Page 2-6 "Detachable Terminal Plug Connections.")
 [Specifications of the no-voltage make contact input]
 Short-circuit current: 5 mA
 Open circuit voltage: 24V
- (2) Contact output terminal connections
 The contact output terminal has no polarity.
 (Refer to Page 2-6 "Detachable Terminal Plug Connections.")
 [Specifications of the relay contact output]
 Dielectric strength: 24V DC
 Control current: Max. 0.5A

Functional ground connections

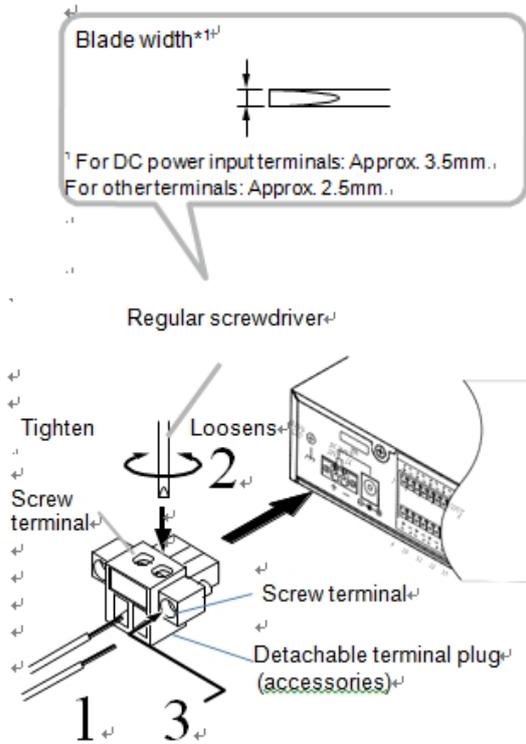


NOTE: Be sure to connect the interface's signal ground terminal.

Detachable Terminal Plug Connections

1. Connect wires to the detachable terminal plug.

[Recommended regular screwdriver]



1-1. Loosen terminal screws and insert wires.

1-2. Fasten the terminal screws securely.

Ensure that the wires do not separate from the plug by pulling them. If they come free, loosen the terminal screws and repeat these steps again.

2. Insert the terminal plug into the interface's terminal block.

3. Tighten the fixing screws. (DC power input terminal only.)

NOTE:

● Do not reverse Steps 1 and 2. When tightening the terminal screws, force is applied to the connector pins on the internal circuit board, potentially causing contact failure.

- When removing the terminal plug, pull it straight out. The terminal plug or terminal block could be damaged if forcibly pulled out at an angle.

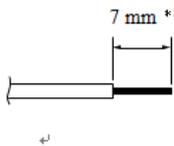
[Information]

● Connection wire size

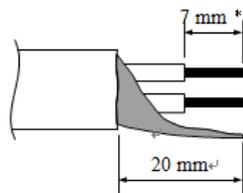
Conductor cross-sectional area : 0.5 – 1.5mm²

AWG : Corresponding to AWG 28 – 12

[Solid and Strand Wires]



[Shielded Wire]



● Wire stripping length*2 When using a ferrule terminal fitted with an insulating sleeve, strip the wire jacket back 8mm or more and cut off the protruding section.

NOTE:

In the case of stranded or shielded wires, do not solder (or tin) the length of exposed wire after stripping. When the wire is tightened in the terminal, the solder may be crushed, increasing contact resistance and potentially causing the temperature at the connection point to rise abnormally.

may be crushed, increasing contact resistance and potentially causing the temperature at the connection point to rise abnormally.

- To prevent core wires from coming loose when 2 wires or a signal wire is connected to a single terminal, crimp such wires with a ferrule terminal fitted with an insulating sleeve.

Recommended ferrule terminals for wires other than power wires

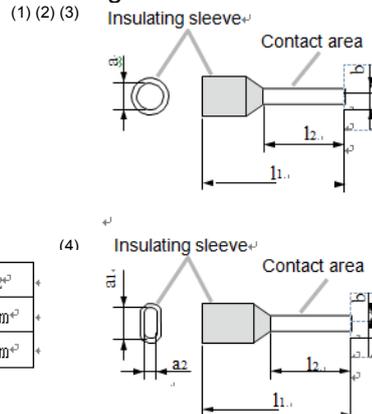
(Dinkle Enterprise Co., Ltd.)

	Model	a	b	l1	l2
①	DN00308D	1.9 mm	0.8 mm	12 mm	8 mm
②	DN00508D	2.6 mm	1 mm	14 mm	8 mm

Recommended ferrule terminals for power wires (Dinkle Enterprise Co., Ltd.)

	Model	a	a1	a2	b	l1	l2
③	DN01508D	3.5 mm	—	—	1.7 mm	14 mm	8 mm
④	DN01508B	—	6.6 mm	3.6 mm	2.3 mm	16 mm	8 mm

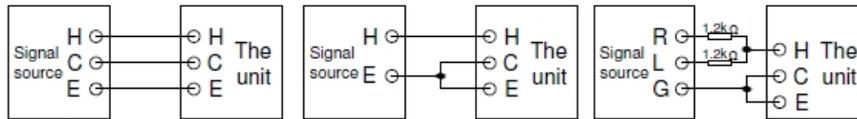
Crimping Tool: Equivalent of DNT01-2206B (Dinkle Enterprise Co., Ltd.)



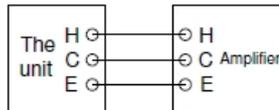
IP-3001AF Interface

Audio Input/Output Signal Terminal Wiring Method

- The audio input terminal features electronically balanced input and may be connected by the following ways.

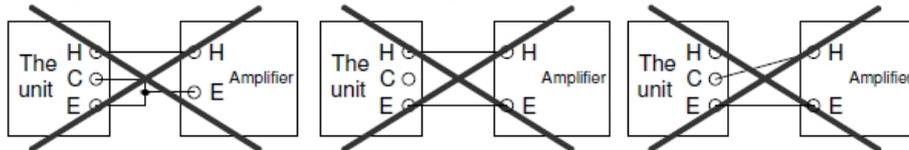


- The audio output terminal features and may be connected by the following way.



- ※ For balanced output of the unit, it must be connected to an amplifier with balanced input, other than one with unbalanced input.

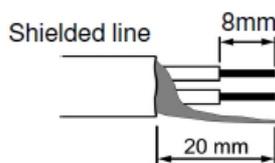
- The audio output terminal may not be connected by any of the following ways.



Detachable Terminal Plug Connections

Notes

- For audio input and output, shielded lines shall be used.
- Avoid soldering cable conductor, as contact resistance may increase when the cable is tightened and the solder is crushed, possibly resulting in an excessive rise in joint temperatures.
- AWG 20~28 wire shall be used.
- Wire terminal treatment



- Wiring steps

Step 1: Hold down the button on the connection plug.

Step 2: Plug the wire with the terminal treated into the wire inlet hole, and release the button.

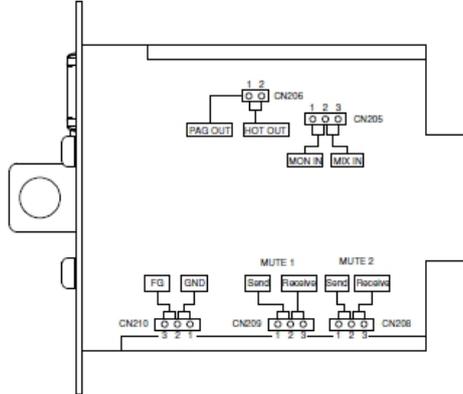
Step 3: Check the wire for proper location and against short circuit with adjacent wires, make sure it will not be pulled off.

IP-300XI Module Settings

When this module is used in combination with different TOA products, it shall be set correspondingly.

Note: no change to the settings is required when it is used in combination with AX-0120 series or AX-0240 series.

.1 As shown in the following figure, the jumpers of the input and output substrates (inside) shall be set.



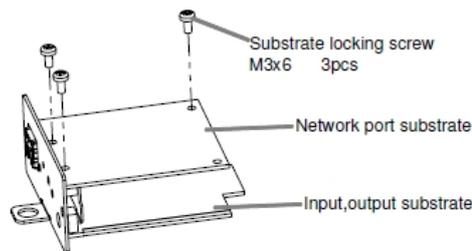
Function	Location Setting	AX-0120 series AX-0240 series	FS-9205DA DA-502H CE-GB DA-502H 5TW	VX-2000 series	BG-2000 series	A-9000M2 series M-9000M2 series A-900MK2 series M-900MK2 series
Audio input switch	CN205	CN205 1-2pin short circuit		CN205 2-3pin short circuit		
Audio output switch	CN206	CN206 1-2pin open circuit		CN206 1-2pin short circuit		
MUTE1 Function switch	CN209	This function is unavailable				Send: This module sends mute control signal to control (mute) other input. Receive: to receive mute control signal from other modules for mute control of this module.
MUTE2 Function switch	CN208					
Reduce noise	CN210	1-2-3 Pin open circuit	GND-side tangent (1-2pin short circuit)	FG-side tangent (2-3pin short circuit)	GND-side tangent (1-2pin short circuit)	

Factory settings: CN205: 1-2pin short circuit; CN206: 1-2pin open circuit; CN208/CN209:Send; CN210:1-2-3 Pin open circuit

Note

AX-0120/0240,FS-9250DA and DA-520H are products sold only for regions.

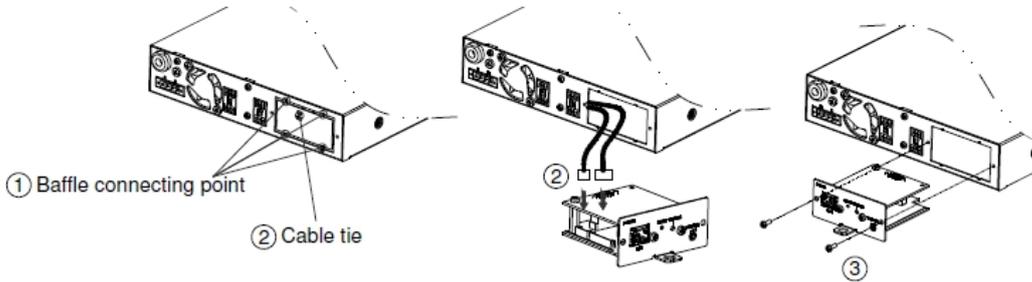
.2 Upon setting of CN205 or CN206, as shown in the following figure, it is required to remove the locking screws on the network port substrate and then the substrate before the setting.



Module Installation

1. The module can be installed in an AX-0120 power amplifier as shown in the following figure.

Note: The same method applies to installation in AX-0120 series, AX-0240 series, FS-9205DA, DA-502H CE-GB, and DA-502H 5TW series power amplifiers.



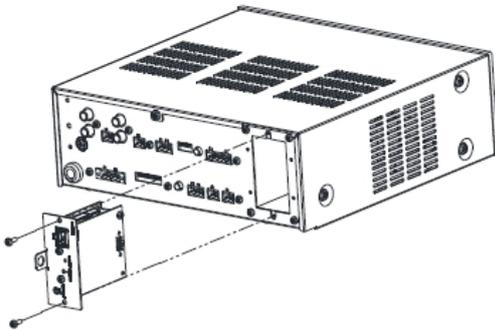
Step 1: Wear protective gloves, use diagonal pliers to shear the module installation baffle on the rear plate of the power amplifier, be careful when taking the baffle to avoid hand injury.

Step 2: Shear the cable tie fastened on the cable with the diagonal pliers, and connect the cable to CN203 and CN207 of the module.

Step 3: Put the module in the power amplifier, and use the M3x8 screws supplied along with the module to fix the module onto the power amplifier.

2. The module can be installed in a BG-2000 power amplifier as shown in the following figure.

Note: The same method applies to installation in A-9000M2 series, M-9000M2 series, A-900MK2 series, M-900MK2 series, VX-2000 series, and BG-2000 series.



Step 1: Remove the blank panel with module slots on the rear plate of the power amplifier.

Step 2: Put the module in the power amplifier, and use the M3x8 screws supplied along with the module to fix the module onto the power amplifier.

Applicable Number of Modules to Different Products

TOA Product Models	Applicable maximum number of the module to be installed
A-9000M2 Series M-9000M2 Series	4
A-900MK2 Series M-900MK2 Series	2
FS-9205DA DA-502H CE-GB DA-502H 5TW	2
AX-0120 Series AX-0240 Series VX-2000 Series BG-2000 Series	1

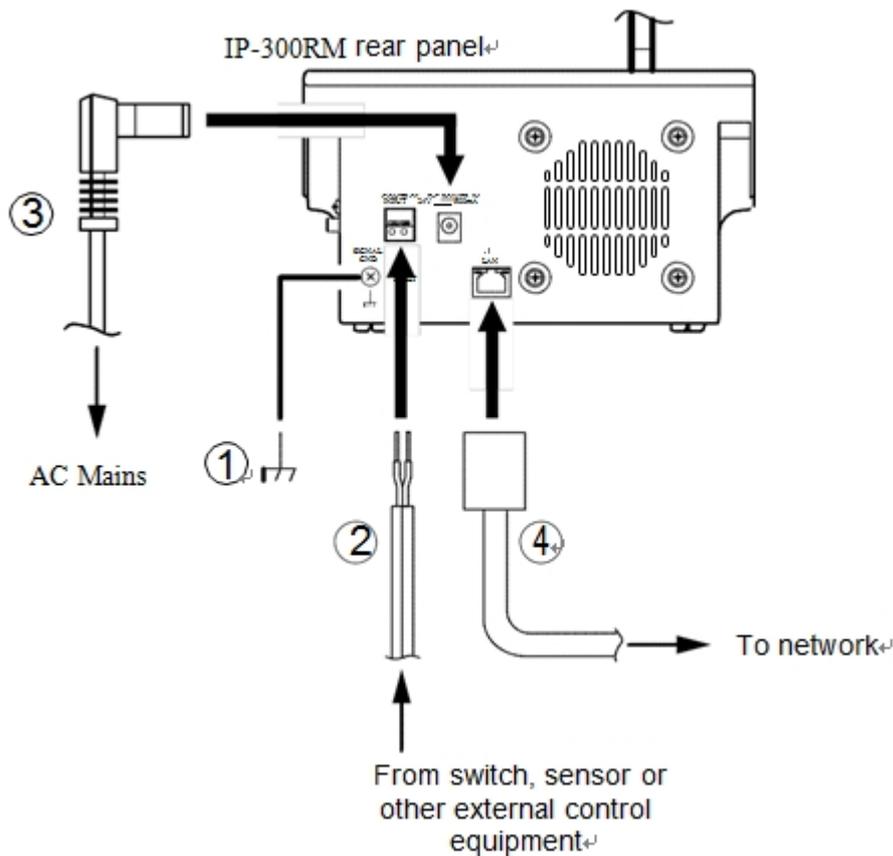
Note

AX-0120/0240, FS-9250DA and DA-520H are products sold only for regions.

IP300RM Network PA Remote Microphone

[Caution]

When using an AC adapter, use the optional AD-246 Adapter. Use of an AC adapter other than the AD-246 could cause fire or other damage.



- (1) Functional ground connection

NOTE:

Be sure to connect the IP-300RM's functional ground terminal.

- (2) Control input terminal connection

[Wire to use]

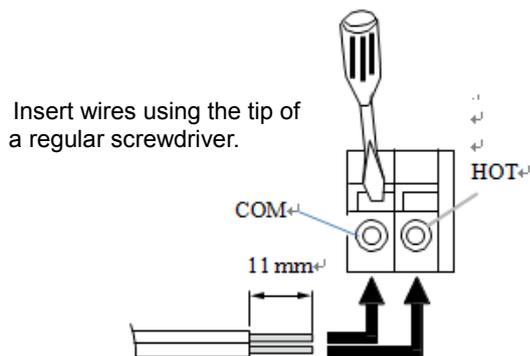
Conductor diameter: $\varnothing 0.4 - 1.3\text{mm}$ (AWG16 – 26), solid wire
 $\varnothing 0.7 - 1.4\text{mm}$ (AWG16 – 22), stranded wire

- (3) AC Adapter input terminal connection

Connect the optional AD-246 AC adapter.

- (4) Network connection terminal connection

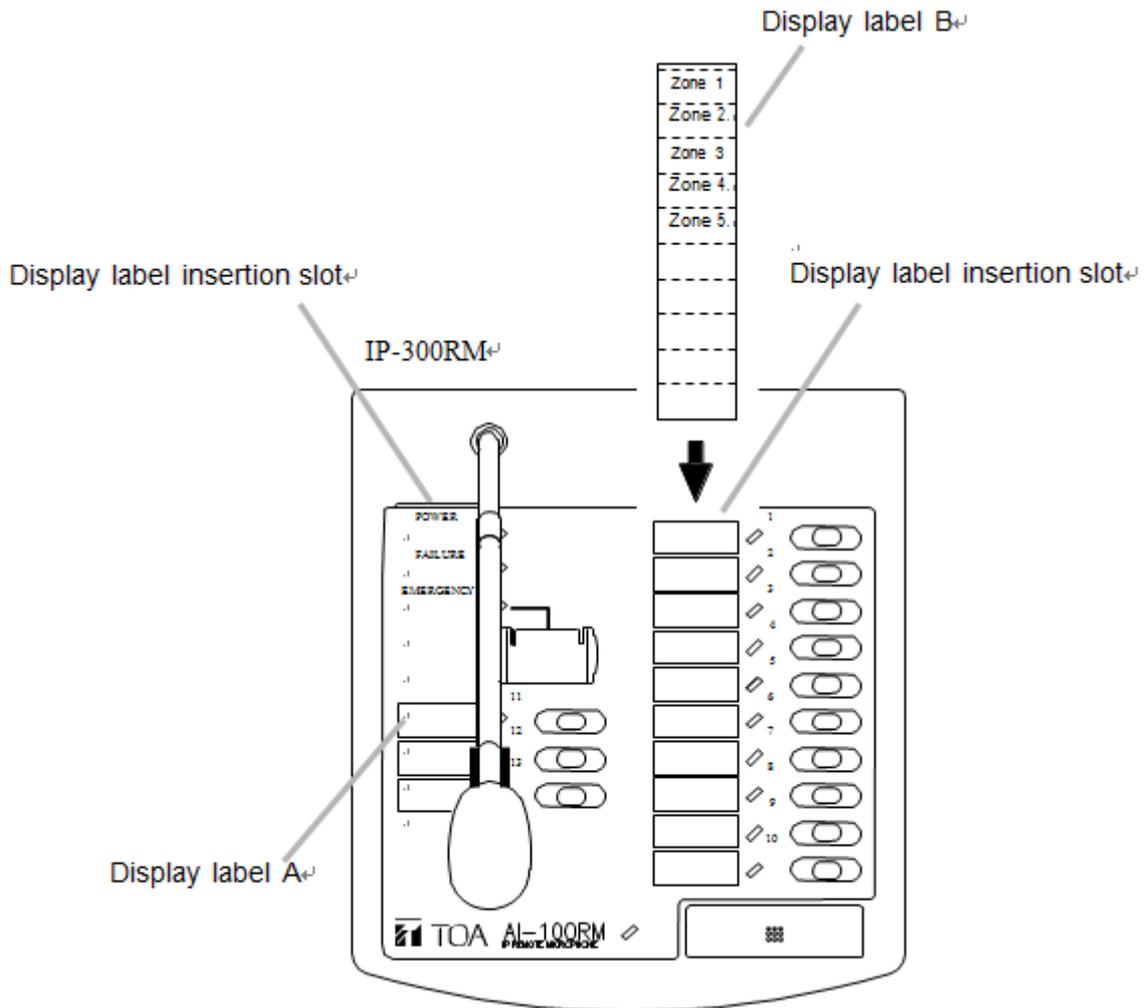
Use Category 5 or greater UTP straight cable for network connections.



4. REMOTE MICROPHONE DISPLAY LABEL ATTACHMENT

Attaching and removing display labels

- Insert a display label cut to the specified size into the label insertion slot.
- To remove the label, extract it from the label slot using a pointed object.



Creating Display Labels

Create a display label:

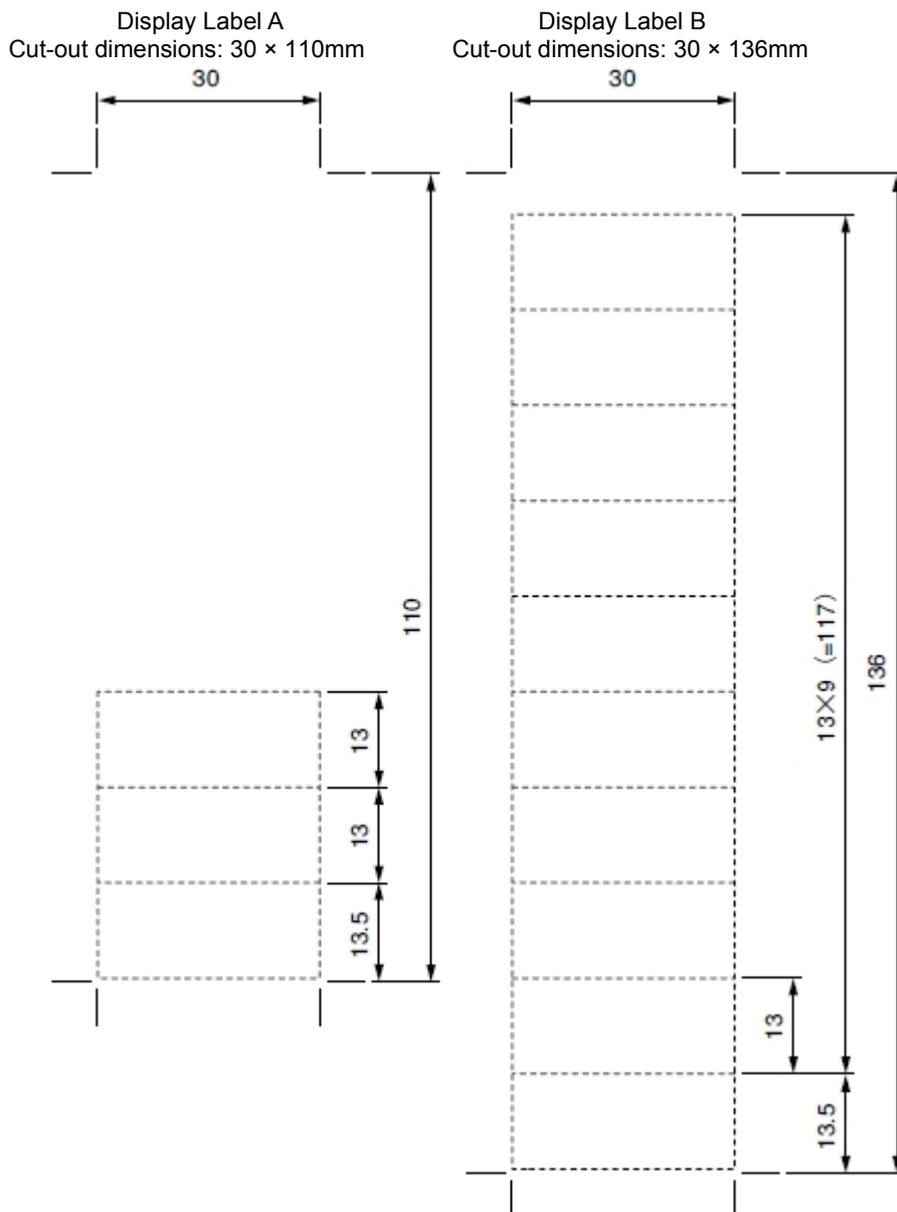
(1) By hand:

Copy the following "Label Dimensional Diagram" to a piece of paper of 0.2mm in thickness or less, write the display contents on it, then cut out the label along the dotted lines.

(2) Using a PC:

Create the label using the following "Label Dimensional Diagram," print it out on a piece of paper of 0.2mm in thickness or less, then cut it out to the specified dimensions.

[Display Label Dimensional Diagram]



Unit: mm

5. SETTING UP THE IP-3000SM SYSTEM MANAGER

System Requirements

< System Manager PC >

Hardware Requirements;

CPU: Intel Core i3-4130 or greater

Memory: 8GB or more

Display: 1028 × 768 resolution or higher

Hard disk drive: 100GB or more free space available (for installation)

Optical drive: DVD-ROM drive

LAN: 2 100BASE-T ports or more

OS :Windows Server 2012 R2 Standard Edition

Database: MySQL 5.6.17

Web Server : Microsoft Internet Information Services 8.5

<PCs using a Web Browser >

Hardware Requirements;

CPU: Intel Core i3-4130 or greater

Memory: 4GB or more

Display: 1920 × 1080 resolution or higher

OS;

Windows 7 Professional (32/64 bits) Service Pack 1

Windows 10 Professional (32/64 bits)

Usable Web Browsers;

Google Chrome, ver. 40 or later

Internet Explorer 11 (32/64 bits)

Mozilla Firefox, ver. 35.01 or later

< Tablets for a Web Viewer >

Hardware Requirements;

Operating device: iPad mini 2, iPad mini 3, iPad Air, iPad Air 2

OS:iOS 9.0.1 or later

Usable Web Browser: Mobile Safari

Installation

For installation instructions, please refer to the “Network PA System Manager IP-3000SM Installation Guide.”

6. SETUP FLOW PROCEDURE

The procedure for setting the network PA system is as follows:

1. Before performing system settings
 - System and equipment settings are required before the network PA system can be operated,
 - Use a web browser to perform settings.
 - All system setting contents are saved to the System Manager.
2. Turn ON the system power.
Power must be supplied to the system before system settings can be performed.
 - Precautions to be observed when turning power ON
Before turning ON the system power, confirm the following:
 - Cables and connectors are correctly and securely wired and connected.
 - The functional ground of each component is correctly connected.
 - Turning the power ON
Follow the below procedure to turn ON the power:
 - (1) Turn ON the power of the connected network components (switching hub, etc.).
 - (2) Turn ON the power of each network PA component.
3. Setup Procedure
 - 3-1. Register equipment in the system.
Register each component connected to the system (System settings → Equipment list screen).
Perform network settings for each component immediately after registration.
 - 3-2. Perform system settings.
Set each necessary function.
 - 3-3. Save the settings.
Save the set contents.

CHAPTER 3. FUNCTIONS AND OPERATION

1. BROADCASTING FUNCTIONS

Types of Broadcast

Broadcasts over network PA systems are made according to the settings for classification, priority degree, fade-in/fade-out (FI/FO) time and ducker. Each setting is performed for individual audio input channels in the system's Equipment settings. For details, please refer to Chapter 4, System Settings.

Explanation of Settings

[Classification]

There are 3 classifications: BGM, general-purpose and emergency.

[Priority Degree]

This refers to the degree of priority assigned to individual broadcasts. The priority degree differs depending on classification.

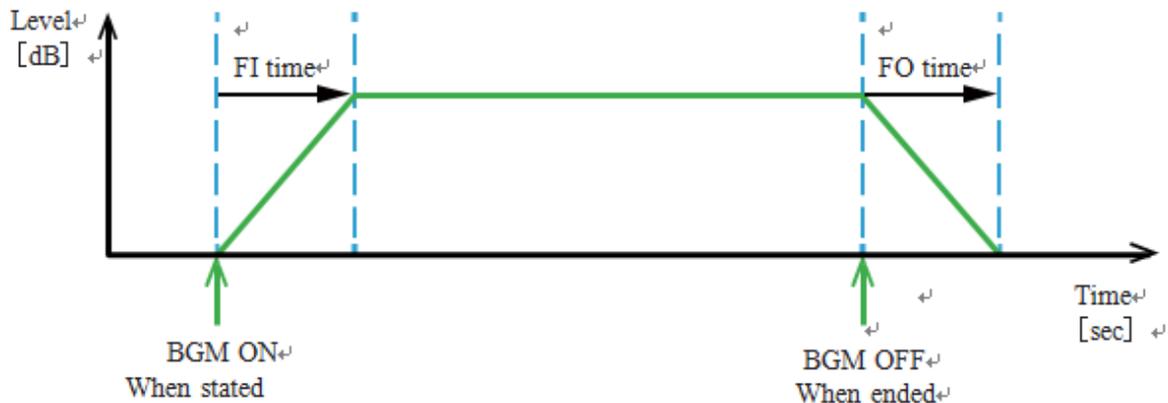
<u>Classification</u>	<u>Priority Degree</u>
Emergency	1 – 10
General-purpose	11 – 20
BGM	21 – 30

When broadcast destinations simultaneously overlap, the broadcast with higher priority is allowed to go through.

[FI/FO Time]

This function is enabled for broadcasts with a 'BGM' classification.

The broadcast fades in or fades out in accordance with the FI/FO beginning or ending times set.



[Ducker]*

This function is enabled for broadcasts with a 'BGM' classification.

Volume and FI/FO times can be set.

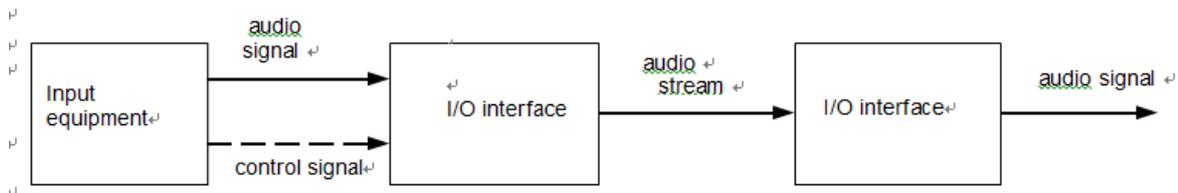
When the BGM broadcast is interrupted by a general-purpose broadcast, its volume is attenuated to a set level following a set time duration.

* A muting function that automatically attenuates the output level of lower priority broadcasts when multiple broadcasts are simultaneously being output.

Broadcasts Initiated by Contact Activation

The I/O (input & output) interface's control input is used for these broadcasts. Broadcasts continue as long as the interface's contact input is at make. Both audio and control signals are inputted to the I/O interface from each connected input, such as from a microphone or audio file, and if the control signal is ON (make status), the broadcast is initiated.

Perform this setting in the Contact Activated Equipment settings portion of the System settings. For details, please refer to Chapter 4, System Settings.

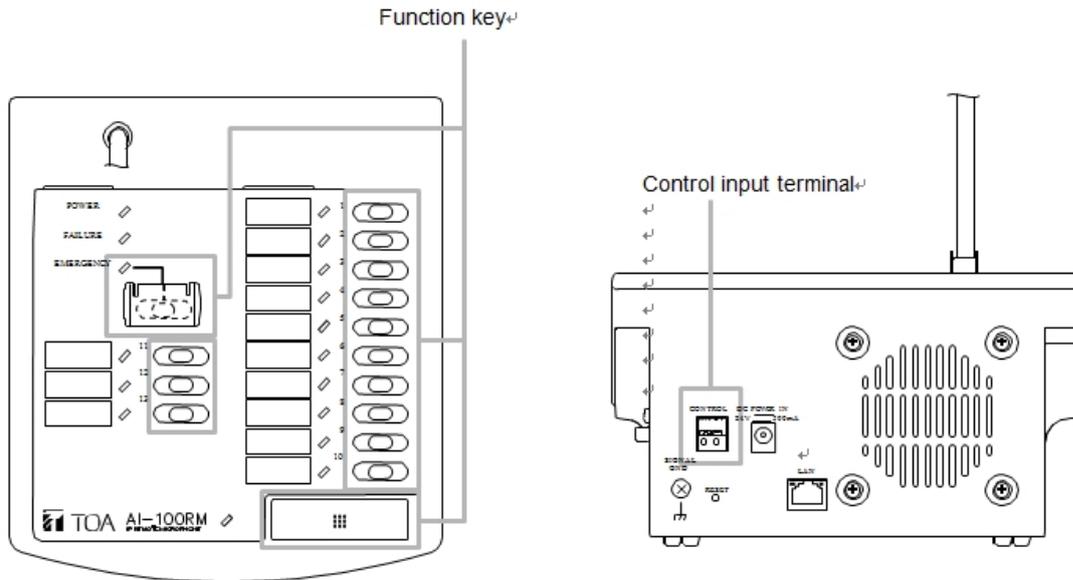


Broadcasts from the IP-300RM Remote Microphone

The following types of broadcasts can be made from the remote microphone:

Broadcast Type	Broadcast Contents
Microphone broadcasts	Broadcast a built-in chime tone and microphone input over selected broadcasting destinations.
External input broadcasts	Select broadcasting destinations, then broadcast the microphone input to the I/O interface or external input from the remote microphone.
Emergency microphone broadcasts	Select broadcasting destinations, then broadcast a built-in chime tone and microphone input. Broadcasts with a higher priority than the microphone broadcast can be carried out.
Recording playback broadcasts	Select broadcasting destinations, then broadcast a built-in chime tone and internal recorded announcement, which is a microphone input recorded during microphone broadcast. The maximum duration of the recorded announcement is one minute. New recordings always overwrite the previous recording. If the microphone broadcast exceeds one minute, it is not recorded.
Pattern activated broadcasts	Broadcasts of patterns in which broadcasting destinations and input sound sources are combined into one can be carried out.

Functions assignable to function keys and control input terminals



Any of the functions shown in the table below can be assigned to the remote microphone's individual function keys and the control input terminal shown above. Assign each function in the Contact Microphone settings portion of the System settings. For details, please refer to Chapter 4 "System Settings."

Assignable Function	Description of Function	Assignment to Multiple Keys
----------------------------	--------------------------------	------------------------------------

Broadcasting destination selection	Select speakers to be activated for broadcast. Contact output control can also be included.	Possible
------------------------------------	---	----------

All selected broadcasting destination cancellation	Used to cancel the selection of all broadcasting destinations selected during broadcast.	Impossible
--	--	------------

Chime selection	Enable or disable chime (ascending and descending chime tone) played during broadcast.	Impossible
-----------------	--	------------

External input broadcast selection	Directs external input broadcasts to selected broadcasting destinations.	Impossible
------------------------------------	--	------------

Emergency microphone broadcast selection	Directs microphone input to selected broadcasting destinations as an emergency broadcast.	Impossible
--	---	------------

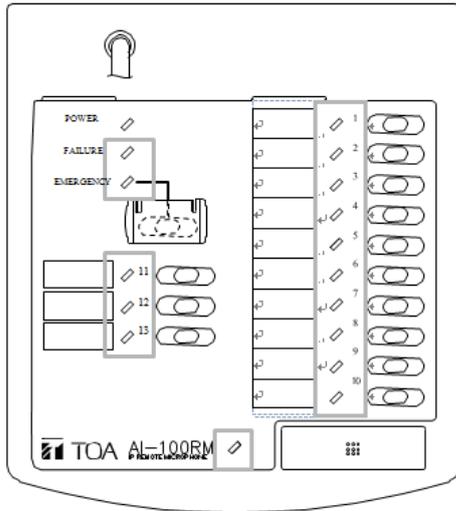
Microphone broadcast selection	Directs microphone input to selected broadcasting destinations.	Impossible
--------------------------------	---	------------

Pattern activation	Activates and terminates patterns in which sound sources and speakers that broadcast are combined together. Contact output control can also be included.	Possible
--------------------	--	----------

Recording Playback	Plays back the microphone input recorded during microphone broadcast over selected broadcasting destinations.	Impossible
--------------------	---	------------

Monitor selection	Plays back the monitor input from the monitor speaker.	Possible
-------------------	--	----------

Functions assignable to each status indicator



Any of the functions shown in the table below can be assigned to the remote microphone's individual status indicators shown above. Assign each function in the Contact Microphone settings portion of the System Settings. For details, please refer to Chapter 4, System settings.

Assignable Function	Description of Function	Status	Display Contents
Broadcasting destination selection status	Continuously lights while a destination is selected.	Off	No destination selected.
		On	Destination currently selected
Chime status	Lights when a chime (ascending/descending tones) is enabled during broadcast. Flashes while a chime tone is sounded.	Off	No chime output during broadcast.
		On	Chime output during broadcast
		Flashing	Chime in progress
External input broadcast status	Continuously lights during external audio input broadcast to selected broadcasting destinations	Off	No external input broadcast.
		On	External input broadcast in progress
Emergency microphone broadcast status	Continuously lights during emergency broadcast of microphone input to selected broadcasting destinations.	Off	No emergency broadcast
		On	Emergency broadcast in progress
Microphone broadcast status	Continuously lights during broadcast of microphone input to selected broadcasting destinations.	Off	No microphone broadcast.
		On	Microphone broadcast in progress.
Pattern activation status	Continuously lights during pattern activation.	Off	No pattern activated broadcast.
		On	Pattern activated broadcast in progress.
Recording status	Continuously lights during playback of microphone input recorded during microphone broadcast.	Off	No recording.
		On	Recording in progress.

Assignable Function	Description of Function	Status	Display Contents
Recording playback status	Continuously lights during playback of recorded microphone broadcast.	Off	No playback of recording.
		On	Recording playback in progress.
Monitor selection status	Continuously lights during playback of monitor input from the monitor speaker.	Off	No playback of monitor input.
		On	Playback of monitor input in progress.
Signal status	Displays the microphone input level status, and lights when the level exceeds -40 dB	Off	Microphone input level less than -40 dB
		On	Microphone input level exceeds -40 dB.
Peak status	Displays the microphone input level status and lights when the level exceeds +8 dB	Off	Microphone input level less than +8 dB
		On	Microphone input level exceeds +8 dB.

NOTE: Indicators continuously light orange while held down, regardless of whether the function is assigned or not.

Operation

The following functions can be enabled by way of the function keys: microphone broadcast, external input broadcast, emergency microphone broadcast, recording playback broadcast, start and end of pattern activated broadcast, and monitor selection.

Further, each status indicator displays the status of its corresponding function. Here, operation examples are explained based on the following function key and status indicator setting examples.

NOTE: Microphone broadcasts, external input broadcasts and emergency microphone broadcasts (explained below) cannot be simultaneously enabled.

[Setting Example]

Key	Status Indicator	Item Name	Function
Function key 1	Status indicator 1	Broadcasting destination 1	Broadcasting destination selection
Function key 2	Status indicator 2	Broadcasting destination 2	Broadcasting destination selection
Function key 4	Status indicator 4	Clear broadcasting destinations	Cancellation of all selected broadcasting destinations
Function key 5	Status indicator 5	Pattern activation 1	Start and end of pattern activated broadcast.
Function key 6	Status indicator 6	Monitor 1	Start and end of monitor playback
Function key 7	Status indicator 7	Monitor 2	Start and end of monitor playback
Function key 8	Status indicator 8	External input	Start and end of external input broadcast.
-	Status indicator 9	Signal status	Display of signal status
-	Status indicator 10	Peak status	Display of peak status
-	Status indicator 11	Recording status	Display of recording status
Function key 12	Status indicator 12	Recording playback	Playback of recorded announcement
Function key 13	Status indicator 13	Chime	Enabling/disabling of chime output.
Emergency key	Emergency indicator	Emergency microphone	Start and end of emergency broadcast.
Talk key	Status indicator 14	Microphone	Start and end of microphone broadcast (lock type*).

*Lock type: Key is locked when pressed, allowing announcements from the microphone. Pressing the key again terminates the announcement.

(Non-lock type): Announcements can be made only as long as the key is held down. Releasing the key terminates the announcement.

[Microphone Broadcasts]

1. Select broadcasting destinations.
If Function Keys 1 and 2 are pressed, the broadcasting destination corresponding to each function key is selected and Status Indicators 1 and 2 light green. To cancel a selection, press its function key again. Cancelling the selection extinguishes the corresponding status indicator. To deselect all destinations, press Function Key 4 (clear broadcasting destinations).
2. Set whether to sound a chime or not.
If Function Key 13 (chime) is pressed, Status Indicator 13 lights to indicate that the chime function is enabled.
3. Start microphone broadcast.
When the Talk key is pressed, Status Indicator 14 (Microphone) lights and microphone broadcasting can begin. If the chime function has been enabled, a chime tone (ascending 4-note tone) will also sound. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker.

Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime ends, Status Indicator 13 (Chime) lights and microphone broadcasting can begin.

4. Terminate microphone broadcast.
Press the Talk key again to terminate the microphone broadcast. If the chime function has been enabled, a chime tone (descending 4-note tone) sounds. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker. Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime ends, Status Indicator 13 (Chime) lights. When the microphone broadcast is finished, Status Indicator 14 (Microphone) and the status indicators for all selected broadcasting destinations extinguish and the selection of broadcasting destinations is terminated.

[External input broadcast]

1. Select broadcasting destinations.
If Function Keys 1 and 2 are pressed, the broadcasting destination corresponding to each function key is selected and Status Indicators 1 and 2 light green. To cancel a selection, press its function key again. Cancelling the selection extinguishes the corresponding status indicator. To deselect all destinations, press Function Key 4 (clear broadcasting destinations).
2. Start external input broadcast.
If Function Key 8 (external input) is pressed, Status Indicator 8 (external input) lights to indicate external input broadcasting can begin.
3. Terminate external input broadcast.
Pressing Function Key 8 (external input) terminates the external input broadcast. When the external input broadcast is finished, Status Indicator 14 (microphone) and the status indicator for the selected broadcasting destinations extinguish, and the selection of broadcasting destinations is terminated.

[Emergency microphone broadcast]

1. Select broadcasting destinations.
If Function Keys 1 and 2 are pressed, the broadcasting destination corresponding to each function key is selected and Status Indicators 1 and 2 light green. To cancel a selection, press its function key again. Cancelling the selection extinguishes the corresponding status indicator. To deselect all destinations, press Function Key 4 (clear broadcasting destinations).
2. Set whether to sound a chime or not.
If Function Key 13 (chime) is pressed, Status Indicator 13 lights to indicate that the chime function is enabled.
3. Start emergency microphone broadcast.
When the Emergency key is pressed, the emergency indicator lights and the emergency microphone broadcasting can begin. If the chime function has been enabled, a chime tone (ascending 4-note tone) will also sound. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker. Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime ends, Status Indicator 13 (Chime) lights and emergency microphone broadcasting can begin.

4. Terminate emergency microphone broadcasts.
Press the Emergency key again to terminate the emergency microphone broadcast. If the chime function has been enabled, a chime tone (descending 4-note tone) will also sound. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker. Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime ends, Status Indicator 13 (Chime) lights. When the emergency microphone broadcast is finished, Status Indicator 14 (Microphone) and the status indicators for all selected broadcasting destinations extinguish and the selection of broadcasting destinations is terminated.

[Pattern activated broadcasts]

1. Start pattern activated broadcast.
If Function Key 5 is pressed, Status Indicator 5 (pattern activation) lights to indicate pattern activated broadcasting can begin.
2. Terminate pattern activated broadcast.
Press Function Key 5 again to terminate the pattern activated broadcast. If a busy signal from currently playing equipment set for the pattern activated broadcast is transmitted to the IP-3010AF's control input, the pattern activated broadcast ends when the 'Busy' signal switches OFF. Status Indicator 5 (pattern activation) extinguishes when the broadcast is terminated.

NOTE:

Perform playing equipment settings by selecting the System Settings → "Playing Equipment Settings" screen. For details, please refer to Chapter 4 "System Settings."

[Monitor Selection Playback Example]

1. Playback monitor announcement.
Pressing Function Key 6 allows monitor input announcements to be played back through the IP-300RM's built-in speaker. Status Indicator 6 continuously lights during playback.
2. Terminate monitor announcements.
Press Function Key 6 again to terminate monitor announcement..
Status Indicator 6 extinguishes when terminated.

NOTE:

Monitors are selected alternatively. When switching monitor announcements, first terminate the monitor announcement currently being played back.

[Microphone Broadcast Recording and Playback]

1. Start microphone broadcast.
The contents of the microphone broadcast are recorded by the IP-300RM remote microphone. Status Indicator 11 (Recording) continuously lights during recording.
2. Terminate microphone broadcasts.
Recording ends. Recording time is one minute or less. If the microphone broadcast is not finished within one minute, the broadcast will not be recorded. Status Indicator 11 (Recording) extinguishes when the recording is finished or one minute elapses after the microphone broadcast begins.

3. Confirm the recorded contents.
Pressing Function Key 12 causes the recorded contents to be played back from the IP-300RM unit's built-in speaker. Status Indicator 12 continuously lights during playback of recorded contents.
4. Terminate the confirmation of the recorded contents.
Pressing Function Key 12 again terminates playback. If playback is finished, Status Indicator 12 extinguishes.
5. Set whether to sound a chime or not.
If Function Key 13 (Chime) is pressed, Status Indicator 13 (Chime) lights to indicate that the chime function is enabled.
6. Select a broadcasting destination and begin the broadcast of the recorded contents.
If Function Key 1 is pressed, the broadcasting destination is selected and Status Indicator 1 lights green.
Pressing Function Key 12 causes the recorded contents to be played back from the IP-300RM unit's built-in speaker. Status Indicator 12 continuously lights during playback of recorded contents.
If the chime function has been enabled, a chime tone (ascending 4-note tone) will also sound. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker. Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime ends, Status Indicator 13 (Chime) lights to indicate that the broadcasting of recorded contents can begin.
7. Terminate recorded contents broadcasts.
The broadcast is finished when all recorded broadcast contents are played back. If the chime function has been enabled, a chime tone (descending 4-note tone) will also sound. In this event, the chime tone can be heard from the IP-300RM unit's built-in speaker. Status Indicator 13 (Chime) flashes while the chime is sounding. When the chime play is finished, Status Indicator 13 (Chime) lights. If the broadcast of the recorded contents is finished, Status Indicator 13 and Status Indicator 1 for the selected broadcasting destination lights, and the selection of broadcasting destinations is terminated.

NOTE: If Function Key 13 is pressed again while the recorded contents are being broadcast, the broadcast can be cancelled partway through its operation.

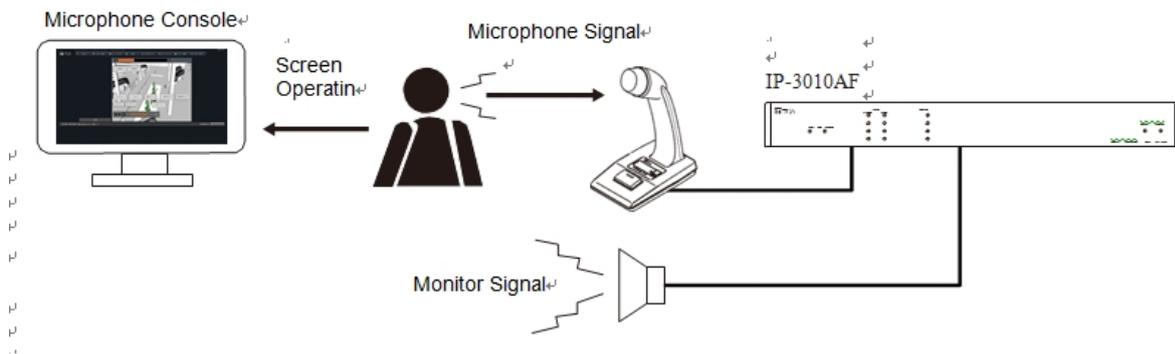
Broadcasts by Microphone Console

Make broadcasts from the Web Viewer's microphone console.

By selecting and operating the buttons on the screen, functions similar to those available on the IR-300RM Remote Microphone can be realized. A single console can be set for each login user. Perform settings in the User settings portion of the System settings.

Select a single audio channel for microphone input. Perform settings in the Microphone settings section of the System settings. For details, please refer to Chapter 4, System Settings.

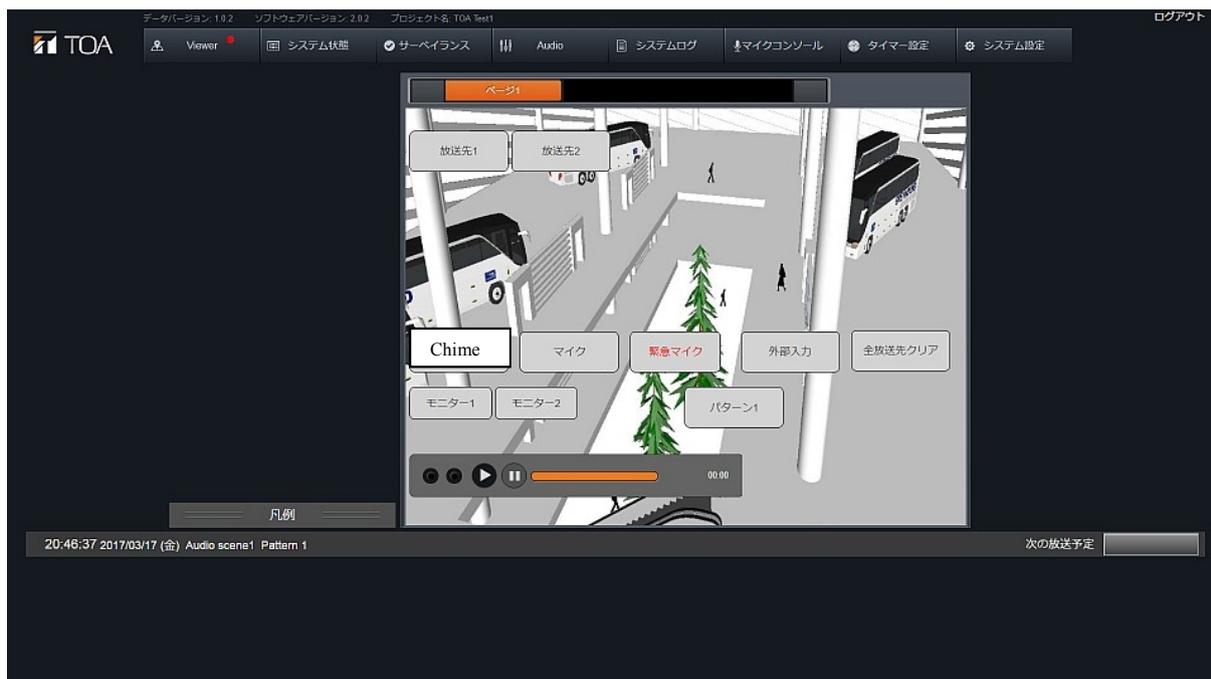
[Configuration image]



The following types of broadcasts can be enabled from the microphone console. Perform settings in the Microphone Console settings portion of the System settings.

Broadcast Type	Broadcast Contents
Microphone Broadcasts	Select broadcasting destinations, broadcast chime tones and microphone input.
External Input Broadcasts	Select broadcasting destinations and broadcast the I/O interface's audio input
Emergency Microphone Broadcasts	Select broadcasting destinations and broadcast chime tones and microphone input. Broadcasts with a higher priority than that of the microphone broadcast can be enabled.
Recording Playback Broadcasts	Select broadcasting destinations, broadcast chime tones and recorded announcements. The recorded announcement is the microphone input recorded during microphone broadcast. The maximum duration of the recorded announcement is one minute, and it always overwrites the previous recording. If the microphone broadcast exceeds one minute, it will not be recorded.
Pattern Activated Broadcasts	Broadcasts in which broadcasting destinations and input sound sources are combined into one pattern are possible.

[Microphone Console Screen Example]



Using the corresponding buttons, microphone broadcasts, external input broadcasts, emergency microphone broadcasts, recording playback broadcasts, activation/deactivation of pattern activated broadcasts, and monitor selection can all be enabled.

Equipment function status can also be confirmed by way of each button's display color. Set each button in the Microphone Console settings and Microphone Console Display settings. For details, please refer to Chapter 4, System Settings.

[Button Setting Examples]

Button	Function
Broadcasting Destination 1	Selection of broadcasting destinations.
Broadcasting Destination 2	Selection of broadcasting destinations.
Clear All Broadcasting Destinations	Cancellation of all broadcasting destination selections.
Pattern 1	Activation or deactivation of pattern activated broadcasts.
Monitor 1	Start and end of monitor playback
Monitor 2	Start and end of monitor playback
Chime	Selection (or deselection) of chime output.
Microphone	Start and end of microphone broadcast.
External Input	Start and end of external input broadcast
Emergency Microphone	Start and end of emergency microphone broadcast

[Display Section]

The display appears as follows if the recording function has been enabled on the Microphone Console setting screen:



Display	Function
(1) Peak Indicator	Lights red when the input level of the audio input channel set on the microphone console screen exceeds +8 dB.
(2) Signal Indicator	Lights green when the input level of the audio input channel set on the microphone console screen exceeds -40 dB.
(3) Playback Button	Plays back the announcement recorded during microphone broadcast. When a Broadcasting Destination button has been selected, the recorded content is broadcast to the selected destination. When no Broadcasting Destination button has been selected, the recorded contents are played back through the monitor speaker.
(4) Stop Button	Stops the recorded broadcast currently being played back.
(5) Recording Status Bar	Displays the remaining time of the recorded contents. The remaining allowable recording time is shown in a count-down format during microphone broadcast. The remaining playback time is shown in a count-down format during playback of the recorded content.

Operation

Each operation example is explained in reference to the examples shown on the microphone console screen and button settings.

NOTE:

Microphone broadcasts, external input broadcasts and emergency microphone broadcasts, which are explained below, cannot be simultaneously initiated.

[Microphone Broadcasts]

1. Selecting broadcast destinations.

Clicking 'Broadcasting Destination 1' and 'Broadcasting Destination 2' buttons displays the destination set for each button, causing each button to light in a color indicating that they are currently selected.

To cancel the selection, click the button again. The button's color returns to its original display color.

To cancel all selections, click the 'Clear all Broadcasting Destinations' button.

2. Setting the chime tone.

When the 'Chime' button is clicked, its color changes to indicate that it is currently selected and the chime is enabled.

3. Starting microphone broadcasts.

When the 'Microphone' button is clicked, its color changes to indicate that a broadcast is in progress, and microphone broadcasting can begin. If the chime function has been enabled, a chime tone (ascending 4-note tone) is broadcast, which can be heard through the connected IP-3010AF interface monitor speaker.

During chime play, the color of the 'Chime' button changes to indicate that the chime is currently sounding.

When chime play ends, the color of the 'Chime' button changes to indicate that the destination selection is in progress, allowing the microphone broadcast to begin.

4. Terminating microphone broadcasts.

Clicking the 'Microphone' button again terminates the microphone broadcast.

If the chime function has been enabled, a chime tone (descending 4-note tone) is broadcast, which can be heard from the IP-3010AF interface's connected monitor speaker.

During chime play, the 'Chime' button's color changes to indicate that the chime is sounding. When chime play ends, the color of the 'Chime' button changes to indicate that the destination selection is in progress.

When microphone broadcasting is terminated, the colors of the 'Microphone' and selected Broadcasting Destination buttons return to their original colors, and the broadcasting destination is deselected.

[External Input Broadcast]

1. Selecting broadcasting destinations.

Clicking the 'Broadcasting Destination 1' and 'Broadcasting Destination 2' buttons displays the destination set for each button, causing each button to light in a color indicating that it is currently selected. To cancel selection, press the desired button again. If cancelled, the button's color returns to its original display color.

To cancel all selections, click the 'Clear All Broadcasting Destinations' button.

2. Starting external input broadcast.

If the 'External Input' button is clicked, its color changes to indicate that the broadcast is in progress and the external input broadcast is started.

3. Terminating external input broadcast.

Clicking the 'External Input' button again terminates the external input broadcast.

If the external input broadcast is terminated, the 'External Input' button and the selected broadcasting destination button return to their original colors and the selection of the broadcasting destination is cancelled.

[Emergency Microphone Broadcast]

1. Selecting broadcasting destinations.

Clicking the 'Broadcasting Destination 1' and 'Broadcasting Destination 2' buttons displays the destination set to each button, causing each button to light in color indicating that the selection is in progress.

To cancel the selection, click the desired button again. If cancelled, the button's color returns to its original display color.

To cancel all selections, click the 'Clear All Broadcasting Destinations' button.

2. Setting whether to sound a chime tone or not.

If the 'Chime' button is clicked, its color changes to indicate that the selection is in progress and the chime is enabled.

3. Starting emergency microphone broadcast.

If the 'Emergency Microphone' button is clicked, its color changes to indicate that the broadcast is in progress and the emergency microphone broadcast is started.

If the chime is enabled, a chime tone (ascending 4-note tone) is broadcast, which can be heard from the monitor speaker connected to and set for the IP-3010AF interface.

During chime play, the 'Chime' button's color changes to indicate that the chime is sounding. If the chime play is finished, the 'Chime' button's color changes to indicate that the selection is in progress and the emergency microphone broadcast is started.

4. Terminating emergency microphone broadcast.

Clicking the 'Emergency Microphone' button again terminates the emergency microphone broadcast.

If the chime is enabled, a chime tone (descending 4-note tone) is broadcast, which can be heard through the monitor speaker connected to and set for the IP-3010AF interface.

During chime play, the 'Chime' button's color changes to indicate that the chime is sounding. If the chime play is finished, the 'Chime' button's color changes to indicate that the selection is in progress.

If the emergency microphone broadcast is terminated, the colors of the 'Emergency Microphone' button and the selected broadcasting destination button return to their original colors and the broadcasting destination is deselected.

[Pattern Activated Broadcast Operation Example]

1. Starting pattern activated broadcast.

When the 'Pattern 1' button is clicked, the pattern activated broadcast begins and the 'Pattern 1' button's color changes to indicate that broadcast is in progress.

2. Terminating pattern activated broadcast.

Clicking the 'Pattern 1' button again terminates the pattern activated broadcast.

If the busy signal of the playing equipment set for pattern activation is connected to the IP-3010AF interface's control input, the pattern activated broadcast ends if the busy signal goes into off state. If the broadcast is terminated, the 'Pattern 1' button's color returns to its original color.

Note:

Perform the settings of playing equipment by selecting the System Settings → 'Playing Equipment Settings' screen. For details, please refer to Chapter 4, System Settings.

[Monitor Selection Playback Example]

1. Playing back monitor input

If the 'Monitor 1' button is clicked, the monitor input is played back through the monitor speaker connected to and set for the IP-3010AF interface.

During playback, the 'Monitor 1' button's color changes to indicate that broadcast is in progress.

2. Terminating monitor input broadcast.

Clicking the 'Monitor 1' button again terminate the playback of the monitor input. If terminated, the 'Monitor 1' button's color returns to its original color.

NOTE:

Monitors are selected alternatively. When switching the monitor input, terminate the monitor input currently played back first.

[Microphone Broadcast Recording and Playback]

1. Starting microphone broadcasts.

The contents of the microphone broadcast are recorded in the IP-3010AF interface.

During recording, the remaining time that allows recording is shown on the recording status bar in a count-down format.

2. Terminating microphone broadcasts.

Recording is finished. A maximum recording duration is one minute. If the microphone broadcast exceeds this limit, its contents are not recorded.

3. Confirming recorded contents.

Clicking the 'Playback' button causes the recorded contents to be played back from the speaker set for the IP-3010AF interface. During playback of the recorded contents, the remaining time for playback is shown on the recording status bar in a count-down format.

4. Finishing confirmation of recorded contents.

Clicking the 'Stop' button terminates the playback.

5. Setting the chime tone.

When the 'Chime' button is clicked, its color changes to indicate that selection is in progress and the chime function is enabled.

6. Selecting broadcast destinations and starting recording.

When the 'Broadcasting Destination 1' button and the 'Broadcasting Destination 2' button are clicked, the destination set to each button is selected and each button lights in color indicating that broadcast is in progress.

To cancel the selection, click the desired button again. The button's color returns to its original display color.

To cancel all selections, click the 'Clear All Broadcasting Destinations' button.

Clicking the 'Playback' button causes the broadcast of the recorded contents to be started. If the chime is enabled, a chime tone (ascending 4-note tone) is broadcast, which can be heard through the speaker set for the IP-3010AF interface.

During chime play, the 'Chime' button's color changes to indicate that the chime is sounding. As soon as the chime ends, the broadcast of the recorded contents is started and the remaining time of the playback is displayed on the recording status display in a count-down format.

7. Terminating the broadcast of the recorded contents.

If playback of the entire recorded contents is finished, the broadcast is terminated. If the chime is enabled, a chime tone (descending 4-note tone) is broadcast, which can be heard through the speaker set for the IP-3010AF interface.

During chime play, the 'Chime' button's color changes to indicate that the chime is sounding. As soon as the broadcast of the recorded content is finished, the broadcasting destination is deselected.

NOTE:

Broadcasts can be stopped partway through by clicking the 'Stop' button while recorded content is being broadcast.

Audio Monitor

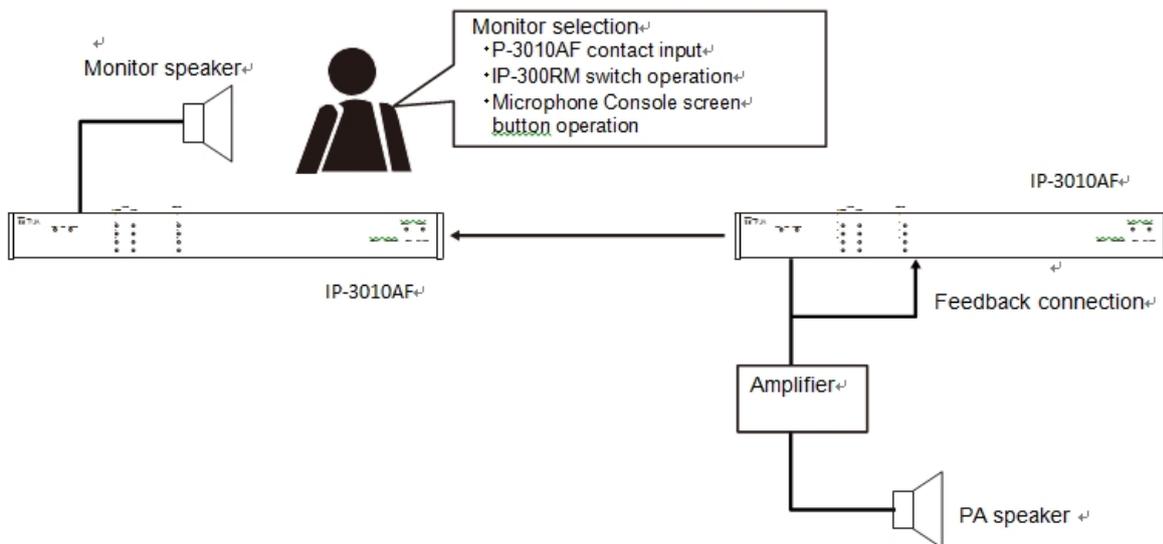
Voice announcements being transmitted to the broadcasting destination can be monitored using the monitor speaker. To initiate monitoring, use the speaker connected to the IP-3010AF Interface's audio output or the IP-300RM Remote Microphone's built-in speaker.

The following settings and connections are required in order to use this function:

- Perform a feedback connection of the voice output being transmitted to the target broadcasting destination with the IP-3010AF's audio input.
- In the System Settings → Equipment Settings, set the classification of the audio input channel to which the output is fed back to 'Monitor.'
- In System Settings → Equipment Settings, set the classification of the audio output channel to which the monitor speaker is connected to 'Monitor.'
- Also select the monitor selection method in System Settings → 'Audio Monitor Settings,' 'Contact Microphone Settings' or 'Microphone Console Settings.'

NOTE: For system setting details, please refer to Chapter 4, System Settings.

[Configuration image]



2. AUDIO I/O ADJUSTMENT

The sound volume and sound quality of the IP-3010AF's audio I/O channels can be adjusted on the Audio screen. The sound volume and sound quality of the IP-300RM's microphone input, external input and monitor speaker external output can also all be adjusted. The adjusted volume and sound quality can be saved to up to 8 Audio scenes*. Further, the I/O levels of each channel can be checked.

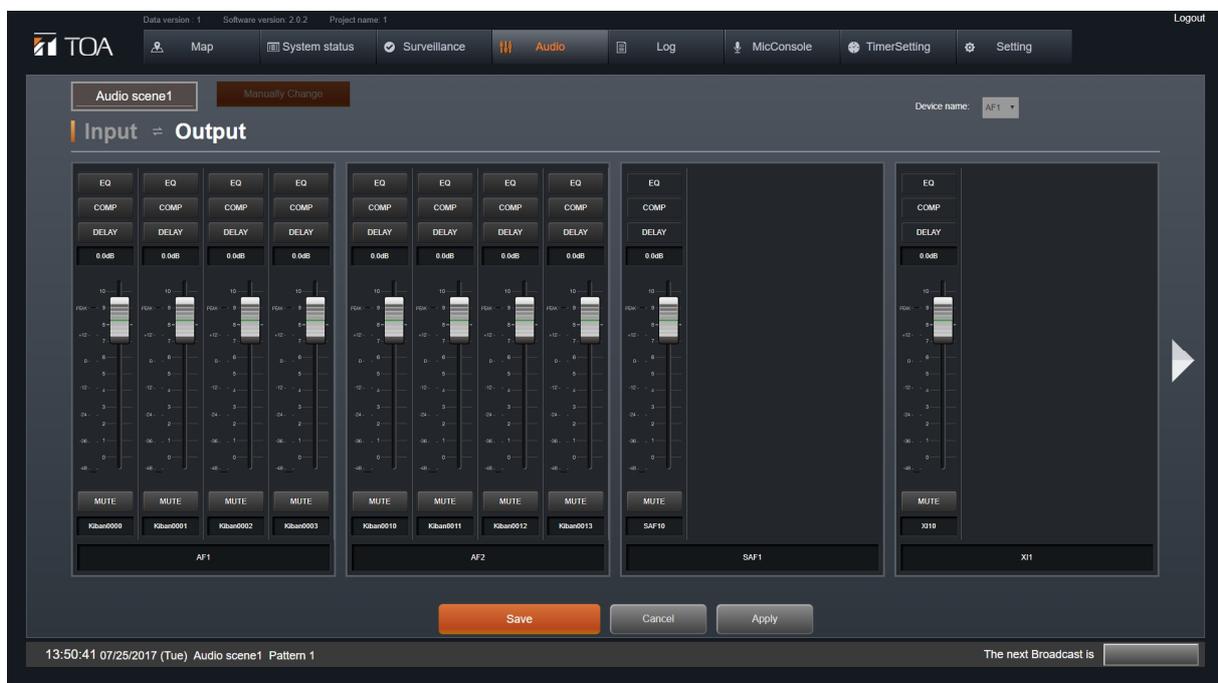
* A unit in which the volume and sound quality parameters of all audio I/O channels are combined.

Audio Screen Display

Audio I/O Display

Click 'Audio' → 'Audio I/O' on the home screen or click 'Audio' → 'Audio I/O' from the header menu.

The Audio I/O display appears on the Audio screen.



(Note)

The above figure shows IP-3010AF.

IP-3001AF and IP-300XI are only one channel for audio input and output respectively. Also, TRIM/EQ/COMP (Input side) and EQ/COMP/DELAY (Output side) can not be set.

Screen	Description
Audio I/O selection	Selects either audio input or output
Item selection button	[Audio Input] Displays TRIM, EQ and COMP setting screens. [Audio Output] Displays EQ, COMP and DELAY setting screens.
Level indication	Indicates the input level in numerical values.
Level meter	Indicates the input level by means of a meter.
Fader	Adjusts the input level
Mute button	Mutes the input and lights in orange while muting is enabled
Audio input name	Displays the audio input name.
Equipment name	Displays the equipment name
Screen switching	The setting status of 4 interfaces are simultaneously displayed on a single screen. To display the status of another 4 interfaces, either preceding or following the current group of 4 units displayed, click the left (◀) or right arrow (▶).
Save button	A confirmation message box is displayed. If the 'OK' button is pressed, the setting is saved and the display reverts to the home screen.
Application button	A confirmation message box is displayed. If the 'OK' button is pressed, the setting is saved and the display reverts to the Audio screen.

Audio I/O level indication

The audio I/O levels for each equipment can be checked with a level meter.

NOTE:

No level indication is provided if communications are not established between the equipment and the System Manager.

IP-300RM's audio input and output

Audio Input

Channel 1	Not used
Channel 2	Not used
Channel 3	Microphone input
Channel 4	External input

Audio Output

Channel 1	Not used
Channel 2	Not used
Channel 3	External output
Channel 4	Monitor speaker

Saving Audio I/O Parameters

Each audio I/O parameter is saved to a selected Audio scene. When saving to other Audio scenes, set and save each parameter after switching to the Audio scene to which the parameter will be saved.

Switching the Audio scene

- Click the Audio scene selection button located at the upper left of the screen to select the Audio scene to be set from the dropdown list.
- To close the dropdown list, press the Audio scene selection button again.

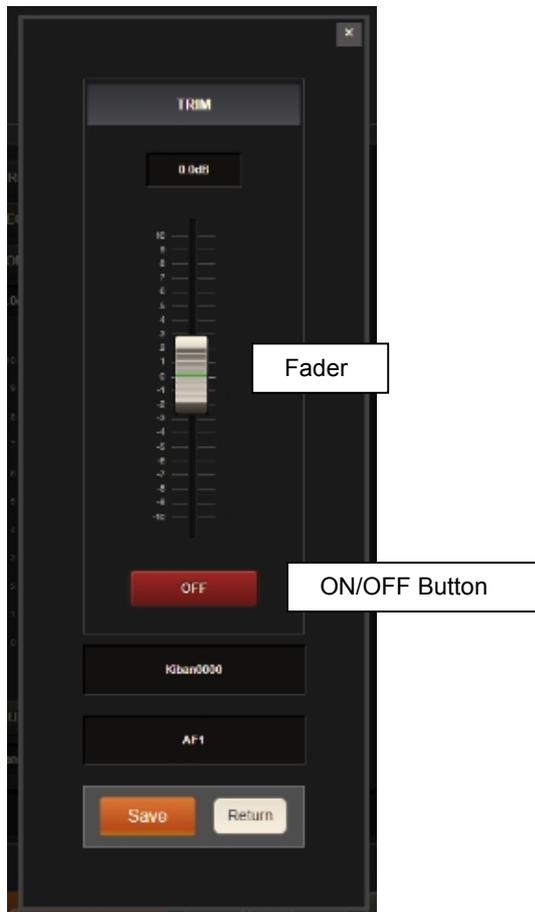


Saving the Audio scene

- After setting each parameter, click the 'Save' button on the audio input or output channel display screen. The confirmation message box appears.
- If the 'OK' button is clicked, the settings are saved and the display returns to the Home screen.
- Similarly, clicking the 'Apply' button displays the confirmation message box. If the 'OK' button is clicked, the settings are saved and the display returns to the Audio screen. Each set parameter can be set as an Audio scene. Up to 8 Audio scenes can be saved.

Trim Settings

Trim can only be set for audio input channels.
Clicking the Trim button displays the Trim screen.



Setting method

- Set the trim with the fader, and enable or disable the setting using the ON/OFF button.
- After setting is complete, click the 'Save' button and close the Trim screen.
- Clicking the 'Return' button closes the Trim screen without saving.

NOTE:

Only users logged in as an Administrator can perform Trim settings.

Audio I/O Level Settings

Setting method

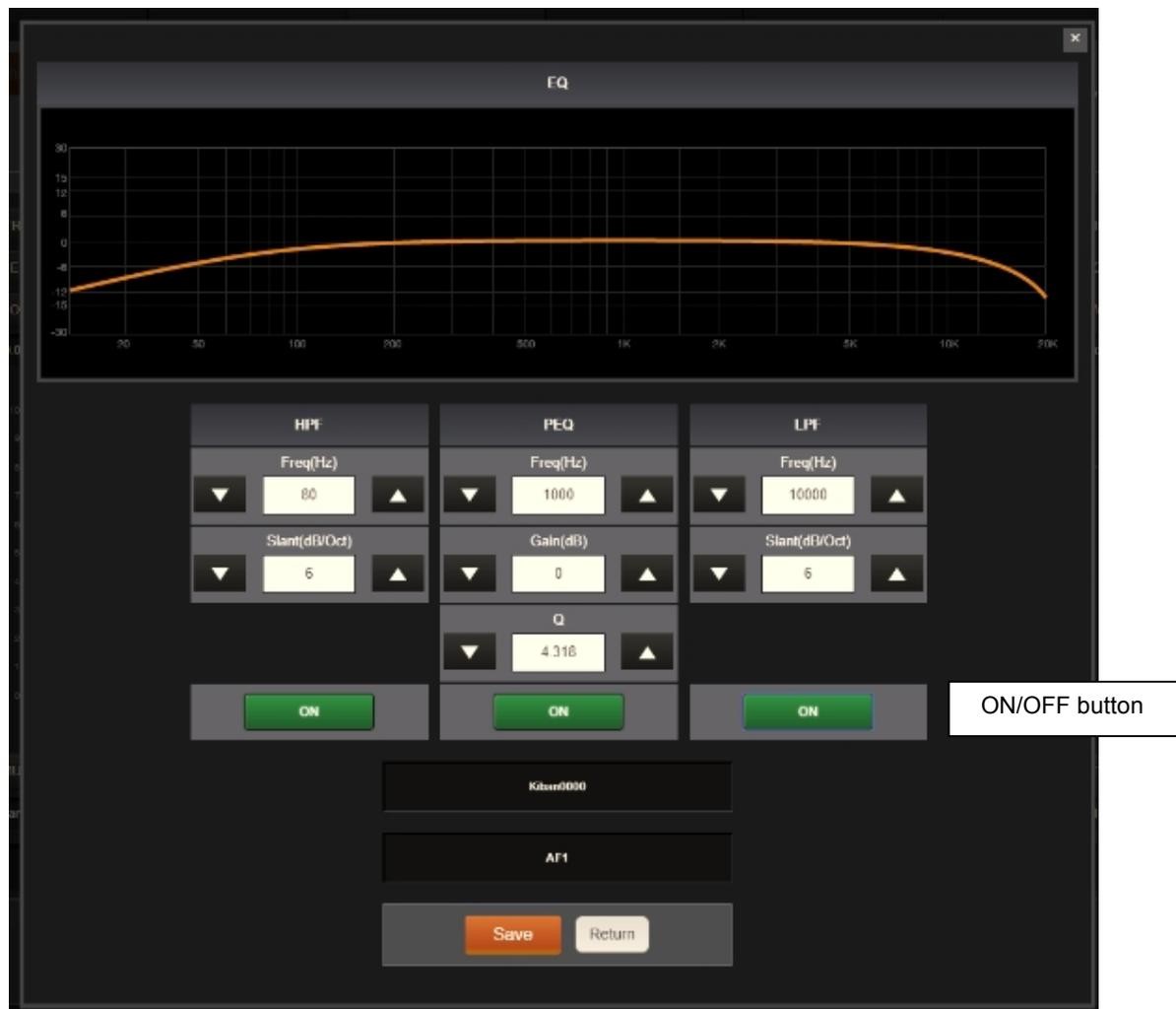
Perform settings using the fader on the audio I/O channel screens.

EQ Settings

Set the equalization for each channel.

Clicking the 'EQ' button displays the EQ screen.

EQ curves are displayed in the upper part of the screen, depending on parameter settings.



Setting parameters, contents and range are as follows:

Parameter	Setting Contents	Setting Range
HPF (High pass filter)	Freq (Hz)	31.5, 63, 80, 125, 250
	Slant (dB/Oct)	-6, -12
PEQ (Parametric equalizer)	Freq (Hz)	63 Hz ~ 12.5kHz
	Gain (dB)	-15 ~ 15, 0.5 dB step
	Q	0.267 ~ 17.31
LPF (Low pass filter)	Freq (Hz)	8k, 10k, 12.5k, 16k
	Slant (dB/Oct)	-6, -12

Setting Method

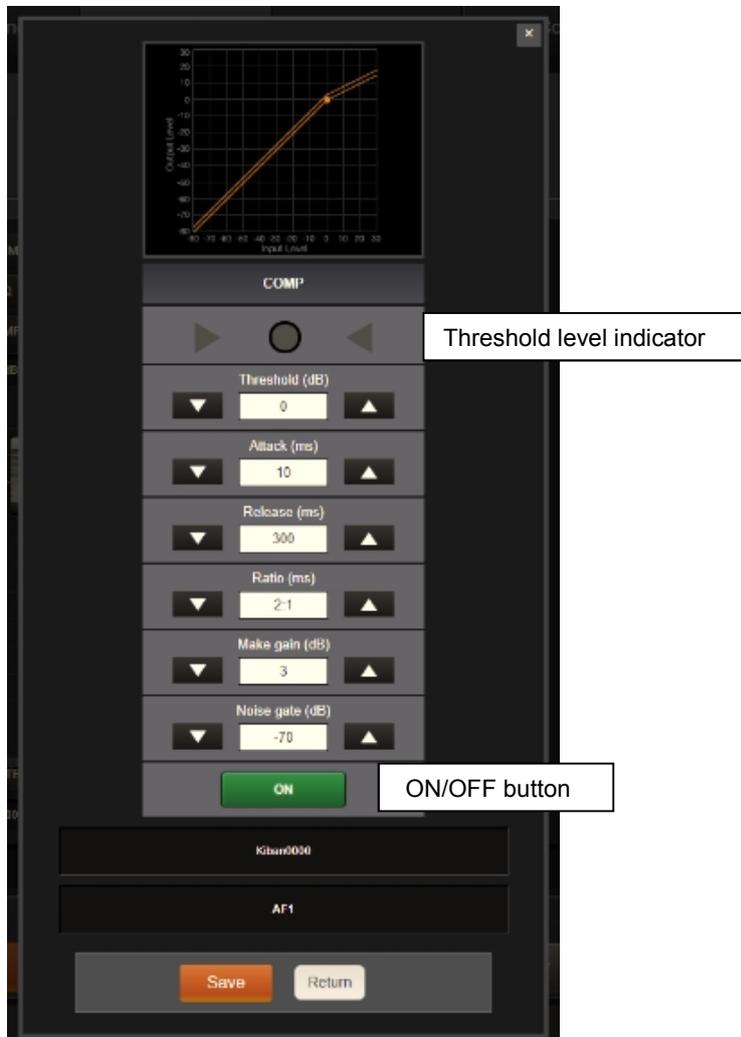
- Set each parameter using the [▽][△] buttons, then enable or disable the setting using the ON/OFF button.
- After setting completion, click the 'Save' button and close the EQ screen.
- Clicking the 'Return' button closes the EQ screen without saving the settings.

Comp Settings

Set the compression for each channel.

Clicking the “COMP” button displays the COMP screen.

COMP curves are displayed on the upper part of the screen, reflecting parameter settings.



Adjustable parameters and setting ranges are as follows:

Parameter	Setting Range
Threshold (dB)	-20 ~ 10 dB, 0.5 dB step
Attack (ms)	0.2, 0.5, 0.7, 1, 1.5, 2, 3, 5, 7, 10, 0, 50
Release (ms)	5, 10, 20, 50, 100, 120, 150, 200, 250, 300
Ratio (ms)	2, 4, 8, ∞
Make gain (dB)	0 ~ 10 dB, 1 dB step
Noise gate (dB)*	-70, -65, -60, -55, -50, -45, -40

*Does not function in the audio output channel.

Setting method

- Set each parameter using the [▽][△] buttons, then enable or disable the settings using the ON/OFF button.
- After setting completion, click the 'Save' button and close the COMP screen.
- Clicking the 'Return' button closes the COMP screen without saving the settings.

Threshold Level Indicator

Indicates the difference between the set threshold level and the actual input level.

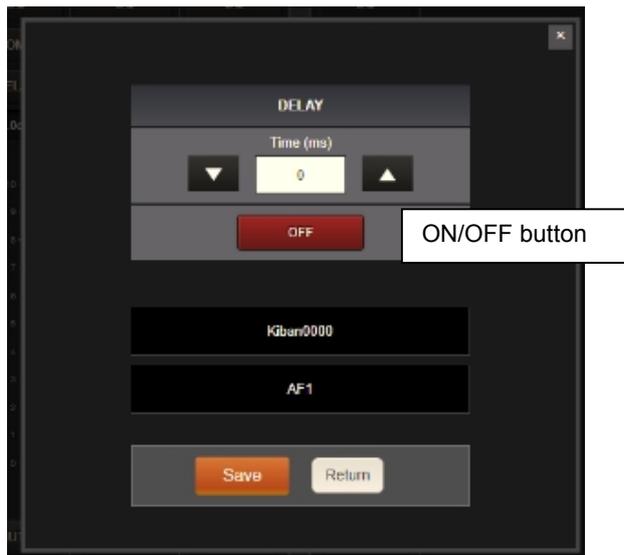
- When the input to set threshold level is $-6\text{ dB} \sim 0\text{ dB}$: The [▷] indicator lights green.
- When the input to set threshold level is $-3\text{ dB} \sim +3\text{ dB}$: The [○] indicator lights green.
- When the input to set threshold level is $0\text{ dB} \sim +6\text{ dB}$: The [◁] indicator lights green.

Delay Settings

Set the delay time for each channel.

Delay times can be set only for audio output channels.

Clicking the 'Delay' button displays the Delay screen.



The following parameter may be set within the indicated setting range:

Parameter	Setting Range
Time (ms)	0 ~ 150

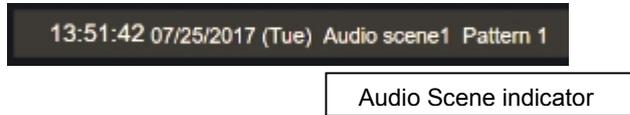
Setting Method

- Set each parameter using the [▽][△] keys, then enable or disable the setting using the ON/OFF button.
- After setting completion, click the 'Save' button and close the Delay screen.
- Clicking the 'Return' button closes the Delay screen without saving the setting.

Audio Scene Display, Switching and Name Change

Display of the Audio Scene in Operation

Which Audio scene the system is currently operating on is displayed on the Audio Scene indicator located at the lower left of the full screen.



Audio Scene Switching

There are two different methods for switching Audio scenes.

- Switching by timer settings

Switches the audio scene at the specified time. Please refer to Page 3-30, 'Timer Functions' for setting details.

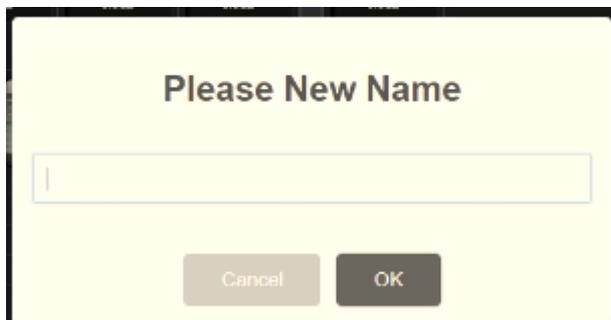
- Switching by Audio screen

Manually switches the audio scene. Select the desired Audio scene from the Audio Scene selection dropdown list on the Audio screen. Refer to Page 3-24, 'Audio Scene Switching.'

Changing Audio Scene Names

The name of the Audio scene can also be changed.

Right-clicking on a selection in the Audio Scene dropdown list displays the name entry field. Enter the name, then click the 'OK' button.



3. TIMER FUNCTIONS

Descriptions of Terms

Term	Description
Event	A single unit of operation performed by timer control. (Example: Morning broadcast of radio exercise program.)
Pattern	A single unit into which multiple events are combined. A single pattern needs to be set per day. Multiple patterns cannot be set for an individual day.
Start Time	A single unit into which multiple events are combined. A single pattern needs to be set per day. Multiple patterns cannot be set for an individual day.
End Time	Time at which an event ends (hh/mm/ss).
Correction Time	Time duration (seconds) of negatively correcting the start time. Set this duration when it is necessary to take into considerations the starting time of amplifiers or other components connected to the input channel.
Repetition / Number of Repetitions	The time interval (minutes) between repetitions of a single event / The number of repetitions.
Classification	One of 3 types of event: Operation Control (including contact output), Contact (output) and Audio Scene
Weekly Program	A pattern covering a week (Monday through Sunday). One single pattern is set in a system
Yearly Program	A pattern covering a span of 2 years
Date Switching Time	Time at which a pattern changes. Default: 0:00 AM.
Audio Scene	A single unit into which the volume and sound quality parameters of all audio I/O channels are combined. Up to 8 scenes can be saved in a system.

Overview of Functions

Using the timer function, Operation Control (including contact output), Contact (output) and Audio Scene control can be enabled at designated times.

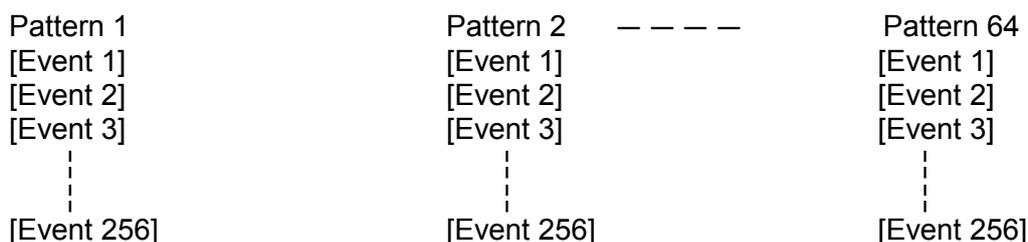
These controls are performed according to the PC's System Manager clock.

The PC's System Manager clock can be corrected by way of the NTP server or I/O interface control input.

- Event operation and contact output controls can be performed at designated times. Audio scenes can also be changed.
- Up to 64 patterns can be set. Up to 256 events can be registered per pattern.
- Weekly programs can be set by assigning patterns for each day of the week. For yearly programs, arbitrary patterns can also be set for individual days.
- Patterns can be preregistered and operated for periods of up to 24 months including the current month.
- By setting the time at which the system's date switches (Date switching time), the timing of pattern switching can be set.
- A single event can be continuously operated beyond the date switching time up to 48 hours in advance.

<Reference: Pattern setting image>

● Pattern and event



● Weekly Program

Mon	Tue	Wed	Thu	Fri	Sat	Sun
Pattern 1	Pattern 5	Pattern 12	Pattern 1	Pattern 1	Pattern 20	Pattern 20

● Yearly Program

Current month 24 months

1 st week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	Pattern 1	Pattern 5	Pattern 12	Pattern 1	Pattern 1	Pattern 20	Pattern 20
2 nd week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	Pattern 1	Pattern 5	Pattern 12	Pattern 1	Pattern 1	Pattern 20	Pattern 20
3 rd week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	Pattern 3	Pattern 3	Pattern 12	Pattern 1	Pattern 1	Pattern 20	Pattern 20
4 th week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	Pattern 1	Pattern 5	Pattern 8	Pattern 8	Pattern 1	Pattern 20	Pattern 20

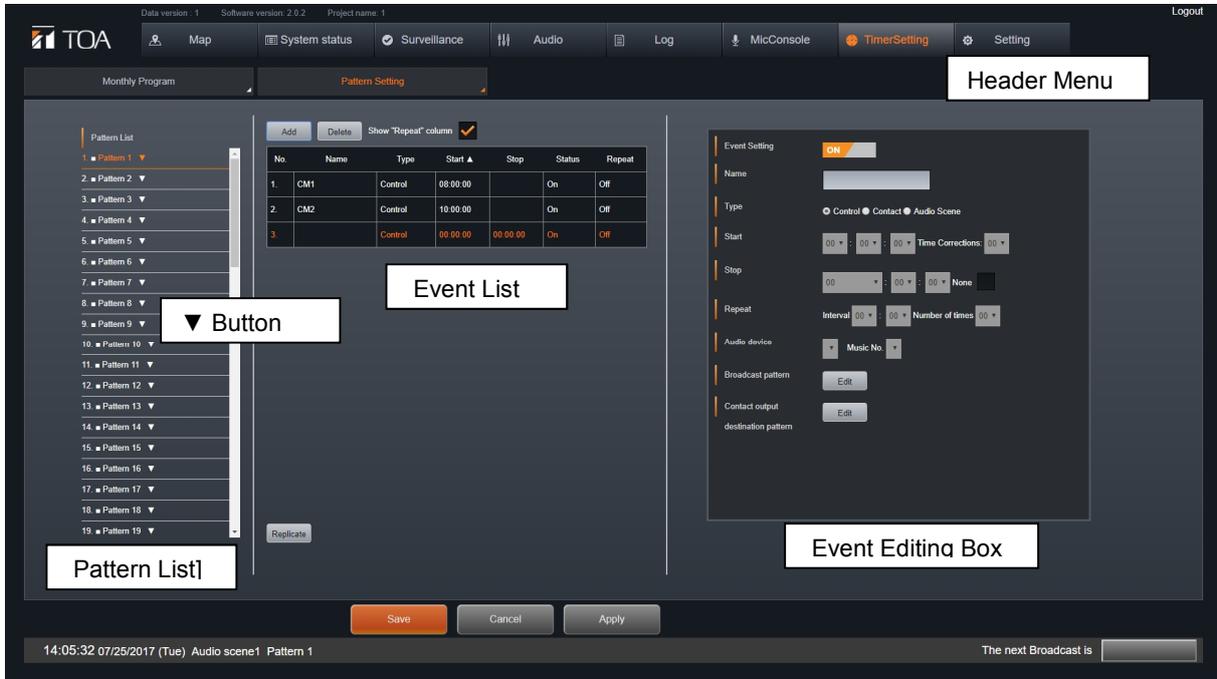
Timer Function Setting Flow

1. Set the pattern.
2. Set the weekly program. The day of the week and the pattern are determined.
3. Reflect the weekly program in the yearly program.
One week's patterns set as weekly programs are reflected in the yearly program of the designated period.
4. Designate dates and set arbitrary patterns within the yearly program. The pattern for the designated date is changed.

Pattern Settings

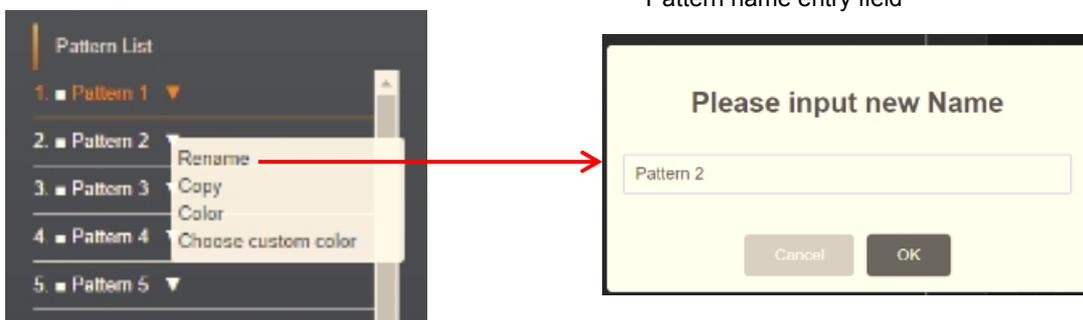
Set the events for a pattern according to the following procedures:

1. Select Home Screen → Timer settings → Pattern settings or Header menu → Timer settings → Pattern settings on the Web Viewer.
The Pattern Setting screen is displayed.



2. Select and click in the desired pattern from the pattern list.
The list of events set for the selected pattern is displayed.
3. Click the '▼' button next to the desired pattern name in the pattern list and select "Change Name." When the pattern name entry field appears, enter an arbitrary pattern name.

[When the '▼' button is selected:]



4. Set an event.

When adding a new event:

Clicking the 'Add' button displays the event editing box on the right side of the screen. Enter the contents for the event setting item. The following items can be selected for the event setting item:

Event Setting Item	Description
Event Settings	Enable or disable the event. ON: Enables the event, causing it to start at the designated time. OFF: Disables the event, which will not start.
Event Name	Enter an arbitrary event name.
Classification	Select from Operation Control, Contact and Audio Scene (alternative selection). Operation Control: Enables settings of playing equipment, broadcasting destinations and contact outputs. Contact: Enables contact output settings. Audio Scene: Enables Audio Scene name settings.
Start Time	Set the event start time and correction time (hh:mm:ss)
End Time	Set the event end time and correction time (hh:mm:ss). None: Enabled only when the classification is set to 'Operation Control.'
Repetition	Validate this setting when repeating events. Set repetition intervals (after XX hours YY minutes) and the number of repetitions (1 ~ 99). (Default settings. Repetition intervals: 00:00, number of repetitions: 0)
Playing Equipment	Settings can be performed when the classification is set to 'Operation Control.' Set the playing equipment and music number. Select the equipment from among those set in the Playing Equipment settings of the System Settings.
Broadcasting Destination	Settings can be performed when the classification is set to 'Operation Control.' Set the broadcasting destinations for the above-mentioned playing equipment.
Contact Output	Settings can be performed when the classification is set to 'Operation Control' or 'Contact.' Set the contact output ON/OFF operation while an event is executed.
Audio Scene Name	Setting can be performed when the classification is set to 'Audio Scene.' Set the Audio Scene. Set all Audio Scene parameters (sound volume and sound quality) on the Audio screen. For details, please refer to Chapter 4, System Settings

To edit an existing event:

Select the line of the desired event from the event list, and edit it in the event editing area.

To delete an existing event:

Select the line of the desired event from the event list, and click the 'Delete' button.

To duplicate an existing event:

Select the line of the desired event from the event list, and click the 'Duplicate' button, then edit it in the event editing area.

5. Click the 'Save' button.

The confirmation message box is displayed.

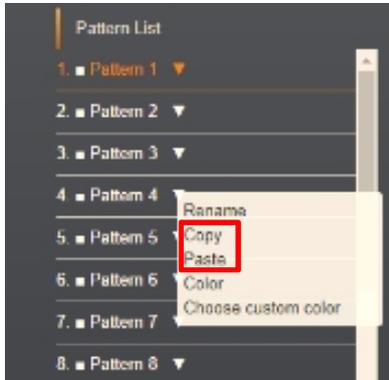
6. Click the 'OK' Button.

The pattern setting is saved and the display returns to the home screen.

Copy of the pattern

It is possible to copy and edit patterns.

Select '▼' for the pattern of the copy source from the pattern list and click the 'Copy' button, then select '▼' for the pattern of the copy destination and click the "Paste" button.

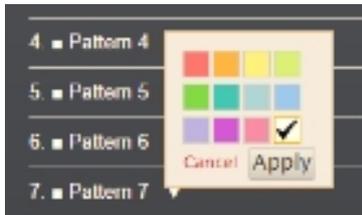


Color of the pattern

The pattern's color can be edited.

Select '▼' for the pattern of the copy source from the pattern list and click the 'Color' or 'Custom color' button.

When the 'Color' button is clicked, select the color from default colors and click the 'Apply' button.



When the 'Custom color' button is clicked, designate the color on a color setting palette and click the '○' button located on the lower right of the screen.



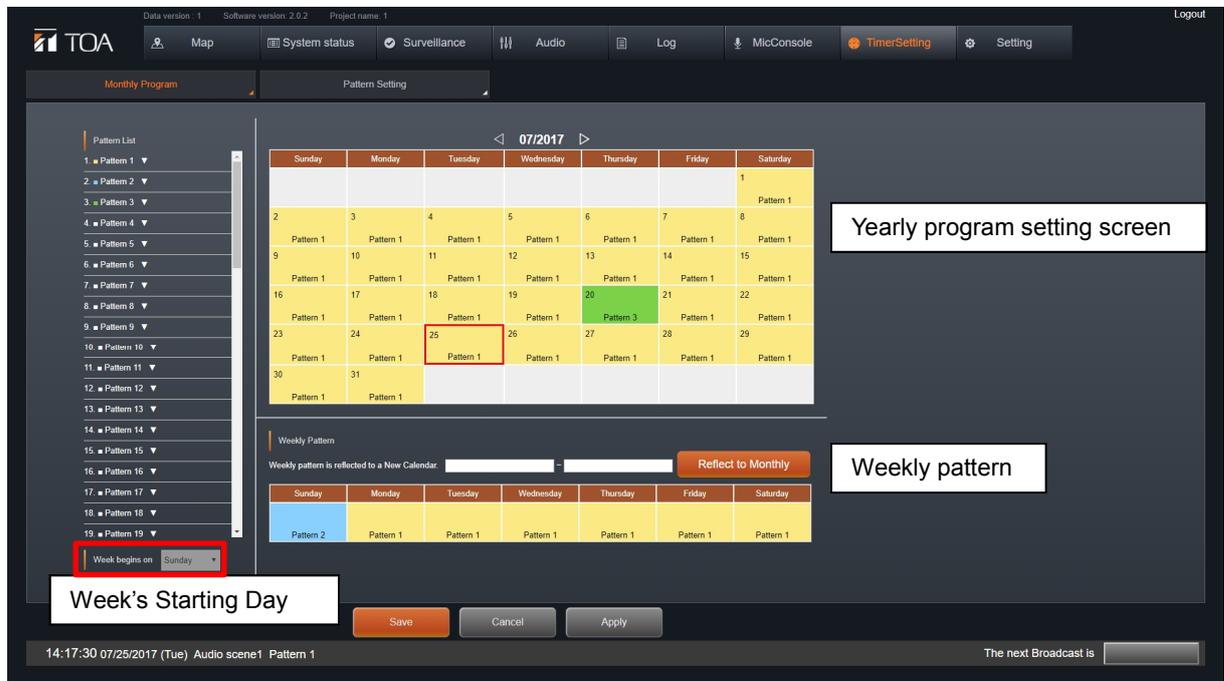
Calendar Settings

Assign set patterns to the weekly and yearly programs.

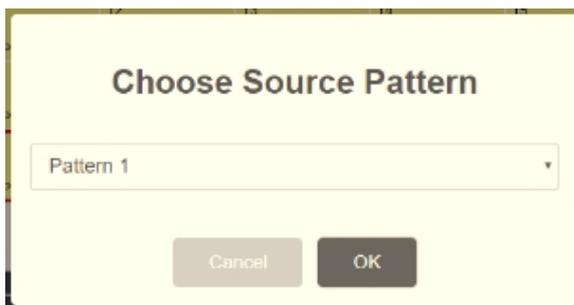
In the weekly program settings, set a basic weekly pattern.

In the yearly program settings, set two years' program after the current month.

1. Select 'Home Screen' → 'Timer settings' → 'Calendar settings' or 'Header menu' → 'Timer settings' → 'Calendar settings' on the Web Viewer.
The Calendar Setting screen is displayed.



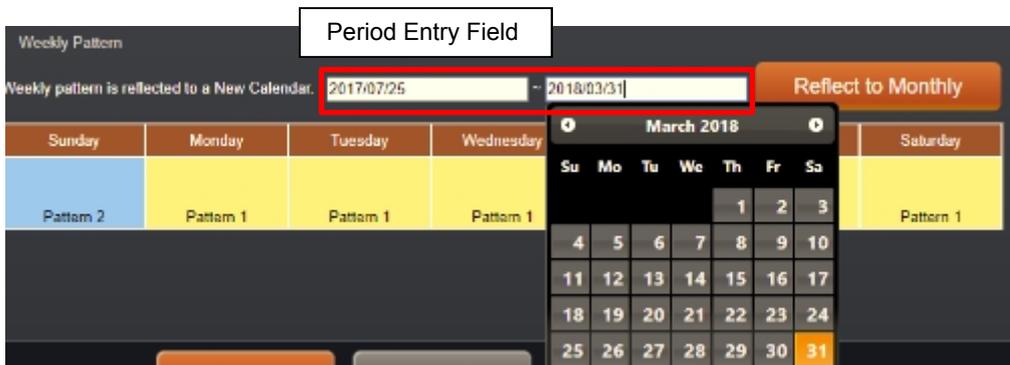
2. Set the weekly program.
 - 2-1. On the Weekly Pattern box, click the frame under the day of week.
The pattern selection box appears.



- 2-2. Click '▼' located on the right side of the pattern selection field.
The pattern list appears.
- 2-3. Select the pattern to be set and click the 'OK' button.
Pattern name and color are displayed within the frame under the day of week on the Weekly Pattern box.
- 2-4. Repeat Steps 2-1 through 2-3 for all days of week desired to be set.

3. Reflect the weekly program in the yearly program.

- 3-1. Click the period designation field on the Weekly Pattern box to designate the period.
Designate the period on the calendar that appears if the period designation field is clicked.



[Period Entry Field]

3-2. Click the 'Reflect in calendar' button.

All programs during the designated period on the yearly program setting screen are set so as to be the same as the setting contents of the weekly program.

4. Set the yearly program.

4-1. Click the date on the yearly program setting screen.

The pattern selection box appears.

4-2. Select the pattern desired to be set for the yearly program and click the 'OK' button.

Pattern name and color are displayed within the frame of the selected date on the yearly program setting box.

4-3. Repeat Steps 4-1 and 4-2 for the desired date.

5. Click the 'Save' button. The confirmation message box is displayed.

6. Click the 'OK' button.

The weekly and yearly programs are registered and the display returns to the home screen.

Week's starting day

It is possible to change the week's starting day of the calendar display.

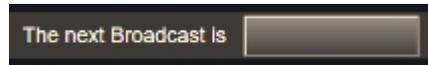
If the day of week is selected from the week's starting day list box, the calendar display on the yearly program setting screen changes.

Broadcast Advance Notice and the Day's Pattern Display

Broadcast Advance Notice Display

This function displays the contents which are to be broadcast next.

The button of the event name to be broadcast next is displayed on the "Next broadcast schedule" box located on the lower part of the screen.



When the event name button is clicked, the details of the event are displayed. Clicking the "Close" button hides the event details.



If the broadcast is started, the event name changes to the one to be broadcast next. If there is not an event to be broadcast next, nothing is displayed.

NOTE:

[Conditions for being displayed on the 'Next broadcast schedule' box]

Only the events in the pattern set to the day can be displayed.

Also, it is displayed only when the classification of audio input channel of the playing equipment to be broadcast in the event is set to "General purpose." Set the playing equipment in the playing equipment settings of the System Settings. For the classification of the audio input channel, perform its settings in the equipment settings of the System Settings. For details, please refer to Chapter 4, System Settings.

The Day's Pattern Display

This function displays which pattern the system is operating on during the day. The day's pattern name is displayed in the lower left corner of the screen.



4. MONITOR FUNCTION

Viewer

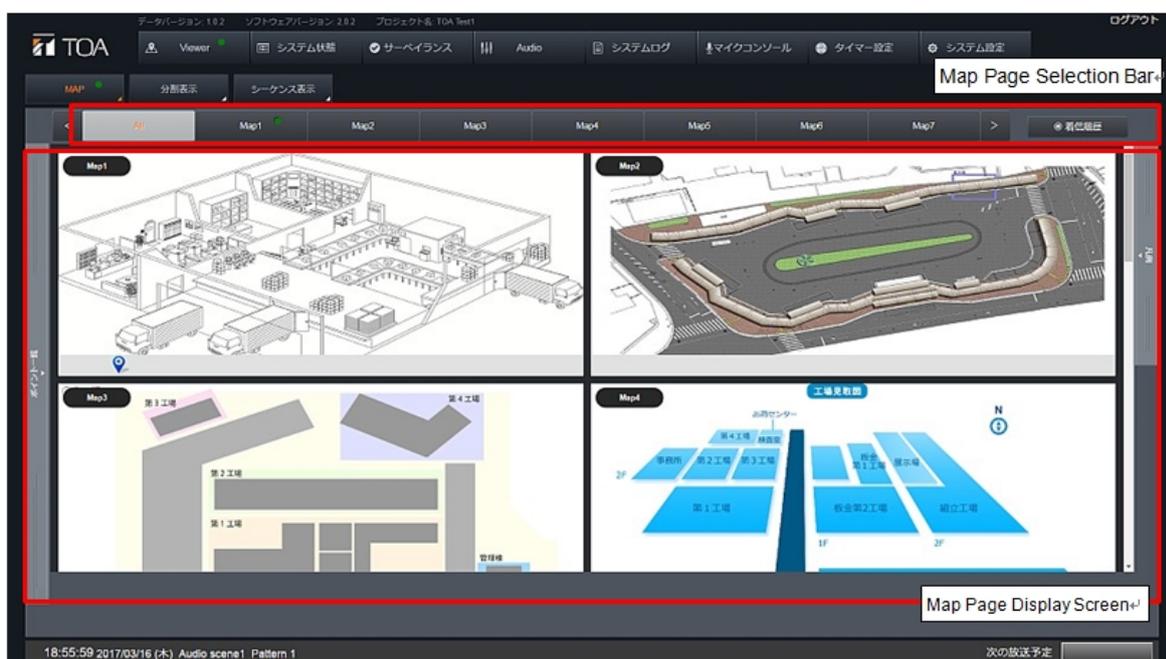
Map

It is possible to display the broadcast status or control broadcasts on a map. Map display settings are performed on the 'Map display settings' screen and 'Map page settings' screen in System Settings. For details, please refer to Chapter 4, System Settings.

Map Screen Display

Click 'Viewer' → 'Map' on the home screen or 'Viewer' → 'Map' from the header menu.

The Map screen is displayed.



The Map screen is comprised of the following parts:

(1) Map Page Selection Bar

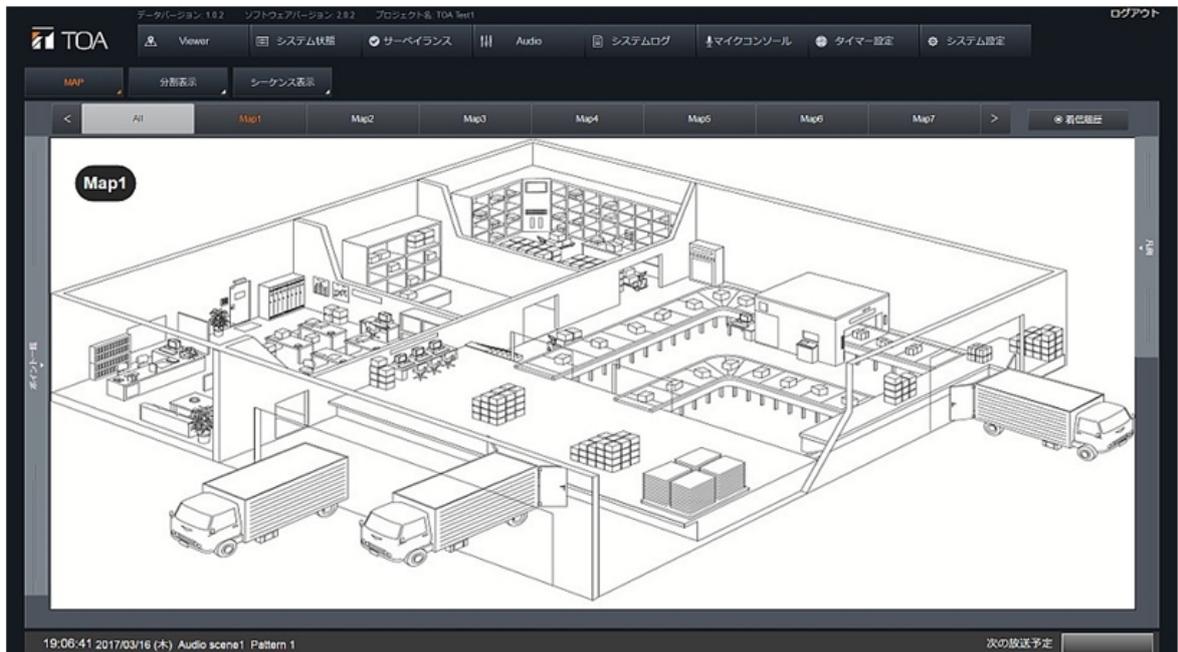
The 'All' button and map page selection buttons are displayed. Clicking a Map Page button displays its corresponding map page. Clicking the 'All' button displays the Map screen.

(2) Map Page Display Screen

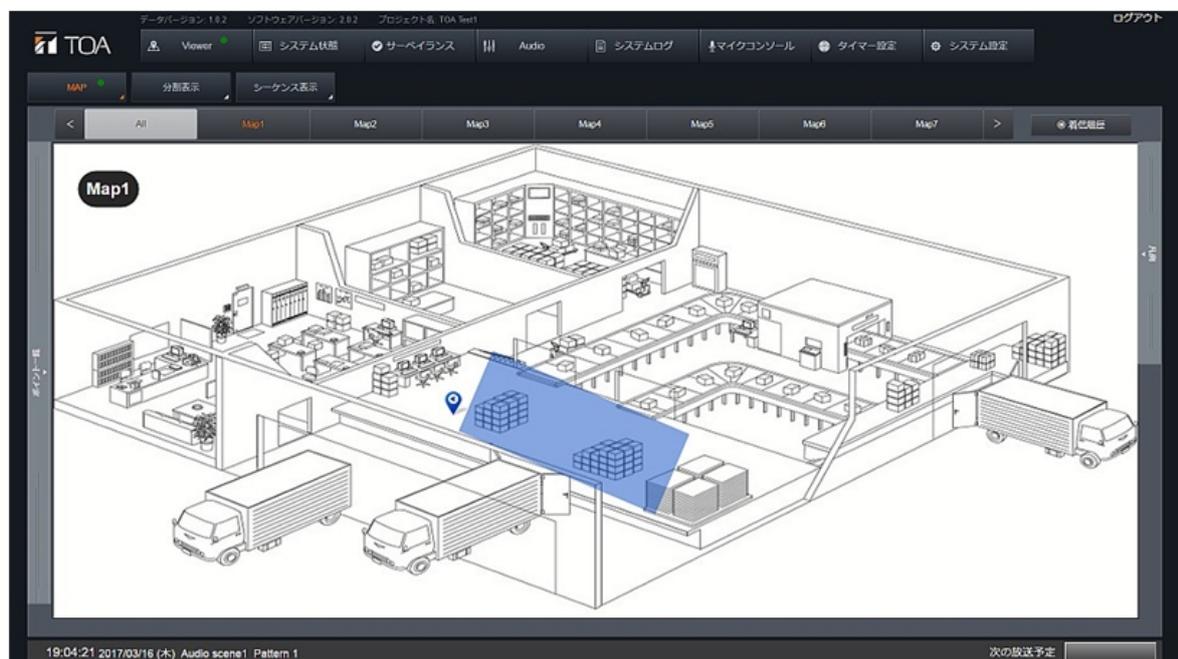
The map page selected in Item (1) above is displayed. When 'All' is selected, status icons are displayed on the lower part of the page depending on the contents of the event set in the map page.

Status Display on the Map Page

- Clicking a Map Page button on the Map screen displays its corresponding map page.



- If the set event occurs on the Map page, a related icon and shape are displayed. For details, please refer to Chapter 4, System Settings.



System Status

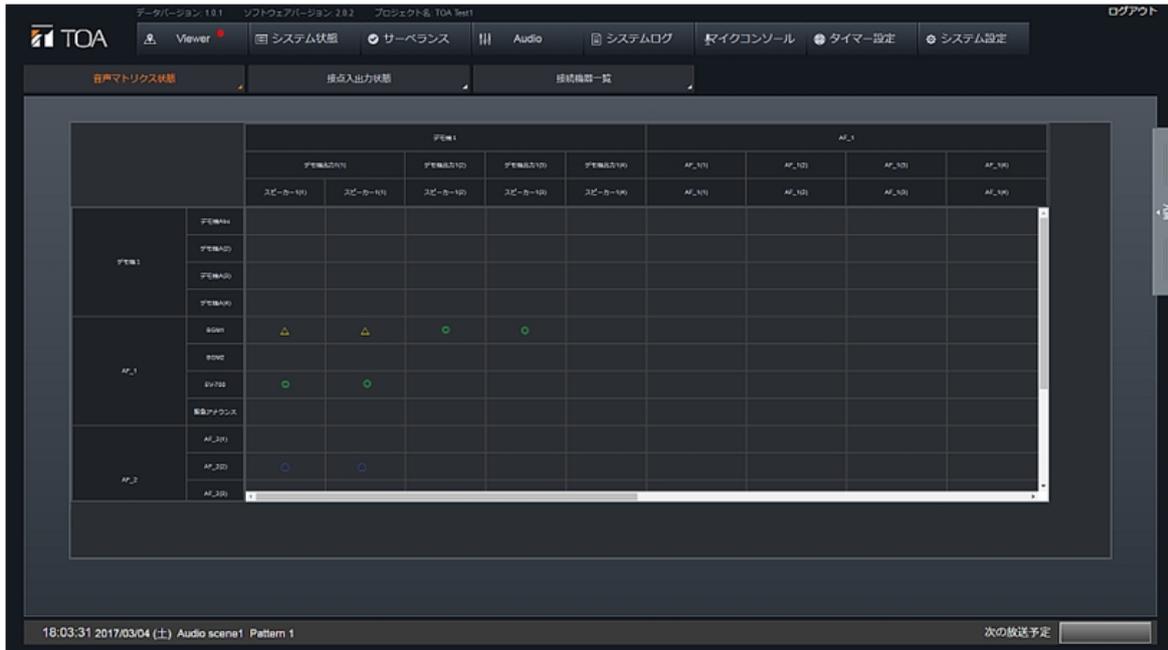
Audio I/O Status Display

System broadcasting status can be quickly checked.

Display of the audio I/O status screen

Click either 'System status' → 'Audio I/O status' on the home screen or 'System status' → 'Audio I/O status' from the header menu.

The Audio I/O Status screen appears.



The audio input channel of each equipment component is shown vertically, while each component's audio output channel and speaker output are displayed horizontally. Symbols are displayed on each intersection point, indicating that the broadcast on the vertical axis is distributed to the output destination on the horizontal axis.

Each broadcasting status is shown by means of symbols.

Green ○: Broadcast is in progress.

Blue ○: Connection gets ready at the broadcasting destination, but broadcast is not actually carried out. (This indication is displayed only when the broadcasting destination of the microphone broadcast is selected.)

Yellow ●: BGM is muted by emergency broadcast.

Yellow △: BGM is broadcast at the level reduced by general-purpose broadcast.

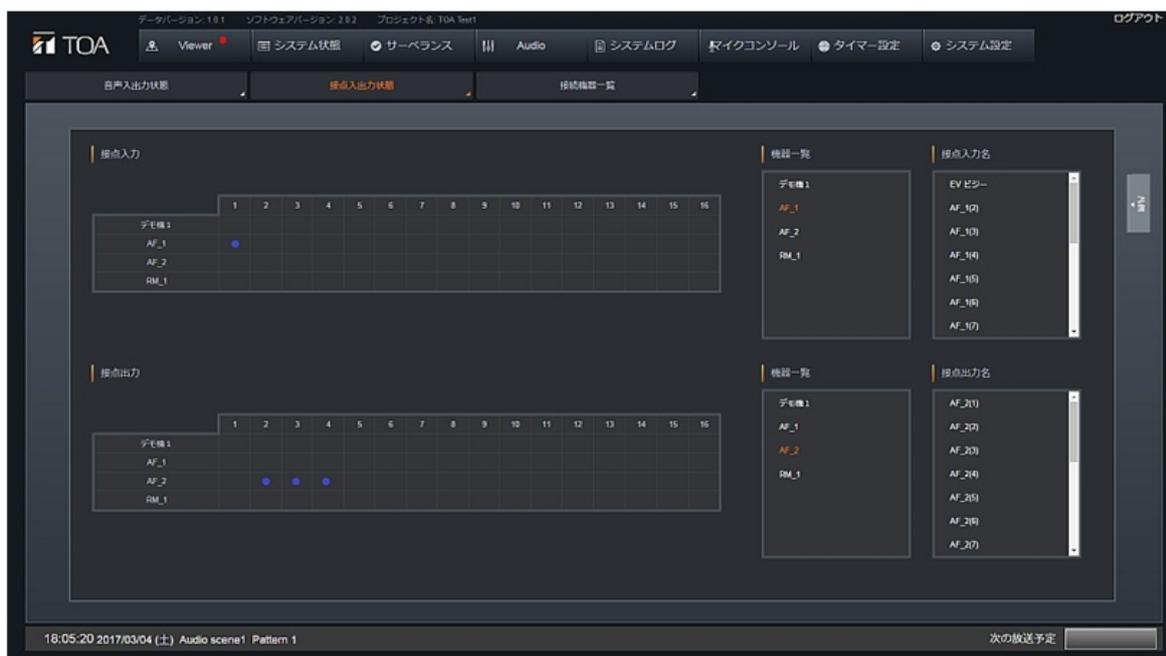
Contact I/O Status

It is possible to quickly confirm the contact I/O status of the IP-3010AF interface and the status of each key and status indicator of the IP-300RM remote microphone connected to the system.

Displaying the Contact I/O Status Screen

Click either 'System status' → 'Contact I/O status' on the home screen or 'System status' → 'Contact I/O status' from the header menu.

The Contact I/O Status screen appears.



(Note)

The above figure shows IP-3010AF.

IP-3001AF and IP-300XI are only one channel for contact Input and Output respectively.

Configuration of the Contact I/O Status Screen

- Contact I/O status display

The contact I/O status is displayed on the contact I/O display boxes. When the contact is closed, the '●' indication is displayed.

- Contact I/O Name display

Contact I/O names of equipment selected from the Equipment List are displayed. To set these names, select System Settings → 'Equipment Setting Screen.'

The IP-300RM's status display

Shown below is the correspondence of the IP-300RM's individual key/terminal/indicator to the on-screen number:

[Contact Input]		[Contact Output]	
No.	Key	No.	Indicator
1	Function key 1	1	Status indicator 1
2	Function key 2	2	Status indicator 2
3	Function key 3	3	Status indicator 3
4	Function key 4	4	Status indicator 4
5	Function key 5	5	Status indicator 5
6	Function key 6	6	Status indicator 6
7	Function key 7	7	Status indicator 7
8	Function key 8	8	Status indicator 8
9	Function key 9	9	Status indicator 9
10	Function key 10	10	Status indicator 10
11	Function key 11	11	Status indicator 11
12	Function key 12	12	Status indicator 12
13	Function key 13	13	Status indicator 13
14	Emergency key	14	Emergency indicator
15	Talk key	15	Status indicator 14
16	Control input terminal (unit's rear panel)	16	Failure indicator

List of Connected Equipment

The communication status of all equipment connected to the system is displayed in list form.

Display of the Connected Equipment List Screen

Click either 'System status' → 'Connected Equipment List' on the home screen or 'System status' → 'Connected Equipment List' from the header menu.

The Connected Equipment List screen appears.

The screenshot shows the TOA System configuration interface. The top navigation bar includes 'Map', 'System status', 'Surveillance', 'Audio', 'Log', 'MicConsole', 'TimerSetting', and 'Setting'. The left sidebar lists various configuration options under 'System configuration'. The main content area is titled 'Device list' and contains a table of connected equipment. The table has the following data:

Device name	Device type	IP address	Subnet mask	MAC address	Default gateway	Server IP address	Pti DNS	WebPort	Location
AF1	AF	192.168.1.10	255.255.255.0	00-05-F9-05-94-01	0.0.0.0	192.168.1.1	0.0.0.0	6001	AREA1
AF2	AF	192.168.1.11	255.255.255.0	00-05-F9-05-94-02	0.0.0.0	192.168.1.1	0.0.0.0	6001	AREA2
SAF1	SAF	192.168.1.12	255.255.255.0	00-05-F9-05-94-03	0.0.0.0	192.168.1.1	0.0.0.0	6001	AREA1
XI1	XI	192.168.1.13	255.255.255.0	00-05-F9-05-94-04	0.0.0.0	192.168.1.1	0.0.0.0	6001	AREA1
RM1	RM	192.168.1.14	255.255.255.0	00-05-F9-05-94-05	0.0.0.0	192.168.1.1	0.0.0.0	6001	AREA1

Configuration of the Connected Equipment List Screen

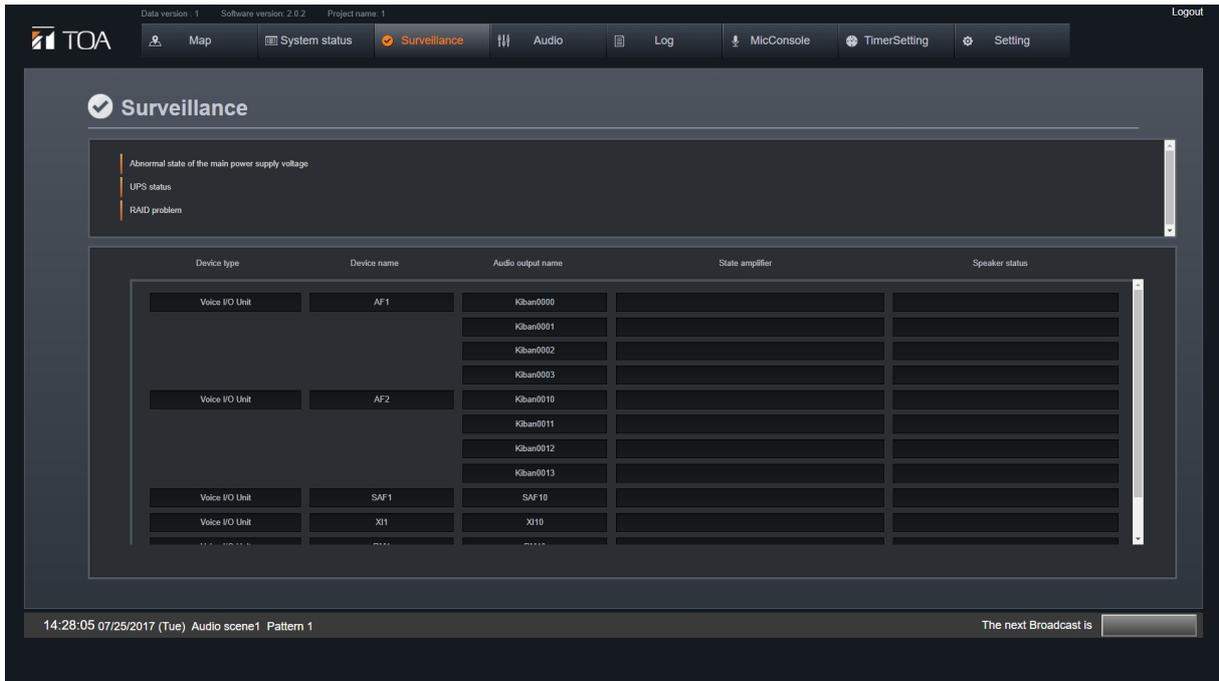
- Status is displayed for each equipment classification.
- If 'NG' is displayed in the connection status column, this indicates that communications between the System Manager and the equipment component are cut off.

Surveillance

This function displays the failure status the system detects.
To enable this function, perform settings by selecting System Settings → 'Surveillance settings' screen.

Surveillance screen display

Click 'Surveillance' on the home screen or click 'Surveillance' from the header menu.
The Surveillance screen is displayed.



Surveillance screen configuration

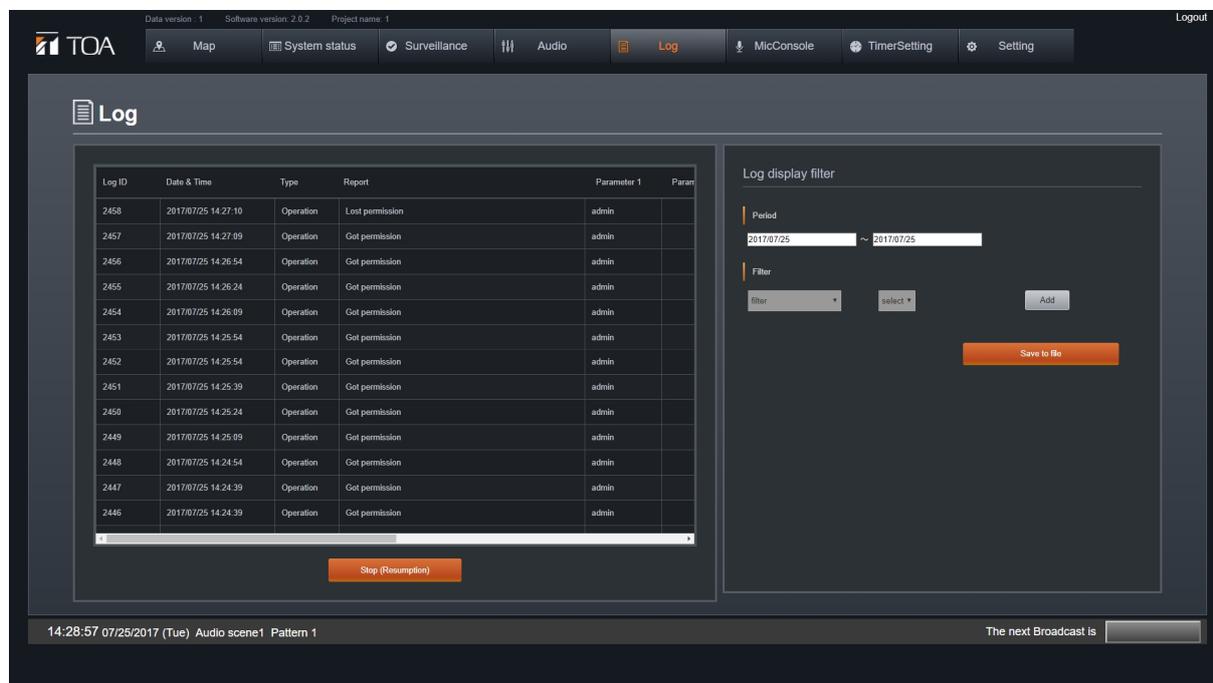
- Failure status is displayed for each failure classification in list form.
- If any failure is detected, its content is displayed in each status display column.

System Log

System operation log can be confirmed in real time.

System log display

Click 'System log' on the home screen or click 'System log' from the header menu. The System Log screen is displayed.



When the System Log screen is displayed, the day's log is displayed from top to bottom in chronological order from the latest log. Log contents can be scrolled up and down with the wheel of a mouse.

NOTE:

- When there are a large number of log entries, it may take slightly longer for all log entries to be displayed.
- When there are a large number of log entries, it may take slightly longer for screen operation to become possible.

Suspending Log Display Update

Clicking the 'Suspend Log Display Update' button makes it possible to suspend updates. The button's color changes to gray during update suspension. When the button is clicked again, the log is updated and displayed in real time.

Filtering the log to be displayed

Logs to be displayed can be filtered in the Filter Log Display box on the right of the screen. Filters that can be set and their explanations are as follows:

Filter	Explanation
Period	Set the log display interval
Filter item	Set the items to be filtered. Multiple items can be set with the 'Add' button. Select the filter item on the dropdown list and set fine filtering for each

Downloading the log

Clicking the 'Save file' button in the Filter Log Display box on the right of the screen allows the displayed log to be downloaded in a csv format. The destination to which the log is downloaded follows the settings of the browser used.

5. SPECIFICATIONS

IP-3000SM System Manager (Sever Software)

Control Object Model	Network PA System I/O interface IP-3010AF I/O interface IP-3001AF I/O module IP-300XI Remote microphone IP-300RM	
Max. Connectable No	I/O interface IP-3010AF: AA pieces I/O interface IP-3001AF: BB pieces I/O module IP-300XI: CC pieces Remote microphone: DD pieces, AA +BB+CC+ DD = 256 pieces	
Max. Connectable No. of Web Viewers	Administrator: 16 units Maintenance: 16 units User: 20 units	
Function	Broadcast and Control	Selected remote microphone, Remote microphone set input sound of I/O interface ,and Output from I/O interface
	Audio Monitor and Level Indication	Designated remote microphone, Monitor output to the or I/O interface, and indication of I/O audio level
	Priority Settings	Emergency: 10 steps, general-purpose: 10 steps, BGM: 10 steps (FIFO or LIFO selectable for simultaneous multiple inputs with the same priority)
	Signal Processing	Volume adjustment, equalization (low-pass filter, high-pass filter, parametric equalizer), delay, compression (each I/O channel)
	Failure Notification	Notification by means of email, contact output or screen display to the designated destination when an error of communication with each component occurs
	Recording and Playback	Recording (max. 1 minute per announcement) and repeated playback of audio input to remote microphone
	Programmable Timer	Yearly program, weekly program (broadcast, contact control and Audio scene), next broadcast advance display
	Log Storage	Storage of logs (for up to 1 year) of each component's broadcast, control and failure (log data can be output in CSV format.)
	Setting and Maintenance	Each component's IP address, subnet mask, default gateway Operation when control input occurs: Broadcast, interlock with external equipment, control output Operation when failure occurs: Control output, alarm tone, failure display, email transmission Map display: Broadcasting status, control status Microphone console: Broadcasting destination selection, pattern activation, microphone and chime Signal processing: Parameter for each audio I/O unit Recording and playback: Recording and playback settings for I/O interface and remote microphone User setting: Login name, password, user authority Firmware upload: I/O interface, remote microphone
	Remote Maintenance	Execution of settings and maintenance from Web browser via Internet
User Authority	Access restriction by 3 types of authority: Administrator, Maintenance and User	
Network	Protocol: IPv4, TCP, UDP, HTTP, HTTPS, ICMP, FTP, SMTP and SNMP. LAN: 1000BASE-T	

NOTE:

- The external appearance and specifications of this equipment are subject to change without notice due to product improvement.

IP-3010AF Audio Interface

Power Supply	24V DC (supplied from an optional AC adapter or 2P detachable terminal block)
Current Consumption	1A or less
Audio Input	Microphone/Line: 4 monaural channels, -60 dB*/0 dB* (switchable, adjustable with volume control), input impedance 2.2k Ω , balanced, phantom power 17V (ON/OFF switchable), detachable terminal block (3P)
Audio Output	Line: 4 monaural channels, 0 dB*, 10k Ω , balanced, detachable terminal block (3P)
Frequency Characteristics	Microphone: 100 Hz ~ 16 kHz \pm 3 dB, Line: 20 Hz ~ 20 kHz \pm 3 dB
Sampling Frequency	48 kHz
Quantization Bit No	16 bits
Distortion Rate	1% or less
Control Input	16 channels, no-voltage make contact input (open circuit voltage: 24V DC, short-circuit current: 5 mA or less), detachable terminal block (20P)
Control Output	16 channels, relay contact output (dielectric strength: 24V DC, allowable current: 500 mA), detachable terminal block (32P)
Network	Network I/F: 100BASE-T, 1 port Network protocol: TCP, UDP, ARP, RTP, ICMP, HTTP, IGMP and FTP
Indicator	LINK/ACT (green) \times 1, STATUS (green) \times 1, SIGNAL (green) \times 4, PEAK (red) \times 4, OUTPUT (green) \times 4, POWER (green) \times 1
Volume Adjustment	Input volume control (rear panel)
Operating Temperature Range	0 ~ 40°C
Operating Humidity Range	90% RH or less (no condensation)
Finish	Surface treated steel sheet, black paint (color approximate to Munsel N1.0), 30 % gloss paint
Dimensions	420 (W) \times 44.3 (H) \times 360 (D) mm
Weight	4.3 kg

*0 dB = 1V

NOTE:

The external appearance and specifications of this equipment are subject to change without notice due to product improvement.

Accessories

Detachabale terminal plug (2P) \times 1
 Detachable terminal plug (3P) \times 8
 Detachable terminal plug (10P) \times 2
 Detachable terminal plug (16P) \times 2
 Rack mounting bracket \times 2
 3 \times 8 tapping screw \times 12
 AC adaptor \times 1
 Power Adapter Wire \times 1
 plastic pad \times 4

IP-3001AF Audio Interface

Power Supply	IEEE802.3af standard power supply device or DC 24V power supply
Current Consumption	2.2W or less
Audio Input	Electronically balanced input, phantom voltage DC17, MIC -60dB /LINE 0dB , detachable terminal block (10P)
Audio Output	Electronically balanced output, 0dB , detachable terminal block (10P)
Frequency Characteristics	Microphone: 100 Hz ~ 16 kHz ± 3 dB, Line: 20 Hz ~ 20 kHz ± 3 dB
Sampling Frequency	48 kHz
Quantization Bit No	16 bits
Control Input	1 channel, no-voltage make contact input (open circuit voltage: 24V DC, short-circuit current: 5 mA or less), detachable terminal block (10P)
Control Output	1 channel, relay contact output (dielectric strength: 24V DC, allowable current: 500 mA), detachable terminal block (10P)
Network	Network I/F: 100BASE-T, 1 port Network protocol: TCP, UDP, ARP, RTP, ICMP, HTTP, IGMP and FTP
Switch	Reset switch in the front Dial switch on one side: MIC/LINE input switch, microphone phantom power supply switch
Indicator	STATUS indicator in the front
Volume Adjustment	Input volume control (front panel)
Finish	Panel: stoving varnish-coated steel plate, black (munsell N1.0 similar color)
Dimensions	71(W) \times 40(H) \times 82(D)mm
Weight	300g

*0 dB = 1V

NOTE:

The external appearance and specifications of this equipment are subject to change without notice due to product improvement.

Accessories

Detachable terminal plug (10P) \times 1
 plastic pad \times 4,
 M3 \times 6 screws \times 5,
 M3 \times 8 screws \times 4,
 power adapter wire fastener \times 1

Optional Equipment : AD-246 AC adaptor, MB-15B

IP-300X1 Network Module

Power Supply	DC 24V supplied by the power amplifier body
Current Consumption	70mA or less
Sampling Frequency	48 kHz
Quantization Bit No	16 bits
Network	Network I/F: 100BASE-T, 1 port Network protocol: TCP, UDP, ARP, RTP, ICMP, HTTP, IGMP and FTP
Switch	Reset switch in the front
Indicator	STATUS indicator in the front
Volume Adjustment	Input volume control (front panel)
Finish	Panel: stoving varnish-coated steel plate, black (munsell N1.0 similar color)
Dimensions	78(W) × 35(H) × 91.5(D)mm
Weight	90g

NOTE:

The external appearance and specifications of this equipment are subject to change without notice due to product improvement.

Accessories

AC adaptor× 1

Power Adapter Wire× 1

IP-300RM IP Remote Microphone

Power Supply	24V DC (supplied from an optional AC adaptor or 2P detachable terminal block)
Current Consumption	500mA or less
External Audio Input	Line: 1 monaural channel, -20 dB*, 10k Ω , unbalanced, ϕ 3.5mm stereo mini jack
External Audio Output	Line: 1 monaural channel, 0 dB*, 600 Ω , unbalanced, ϕ 3.5mm stereo mini jack
Frequency Characteristics	Microphone: 100 Hz ~ 16 kHz \pm 3 dB, Line: 20 Hz ~ 20 kHz \pm 3 dB
Sampling Frequency	48 kHz
Quantization Bit No	16 bits
Distortion Rate	1% or less
Control Input	1 channel, no-voltage make contact input (open circuit voltage: 24V DC, short-circuit current: 5 mA or less)
Network	Network I/F: 100BASE-T, 1 port Network protocol: TCP, UDP, ARP, RTP, ICMP, HTTP, IGMP and FTP
Monitor Speaker	Built in
Operation Section	Function key \times 13, Emergency key \times 1, Talk key \times 1
Indicator	POWER (green) \times 1, FAILURE (orange) \times 1, EMERGENCY (red) \times 1, status indicator (green/orange) \times 14
Operating Temperature Range	0 ~ 40°C
Operating Humidity Range	90% RH or less (no condensation)
Finish	Panel: ABS resin, black paint (color approximate to Munsel N1.0) Main body: Surface treated steel sheet, black (color approximate to Munsel N1.0), 30 % gloss paint
Dimensions	190 (W) \times 113 (H) \times 216.5 (D) mm (excluding microphone)
Weight	1.5 kg

*0 dB = 1V

NOTE:

The external appearance and specifications of this equipment are subject to change without notice due to product improvement.

Optional Equipment: AD-246 AC adaptor

CHAPTER 4. SYSTEM SETTINGS

1. STARTING THE WEB VIEWER

Login Screen

This screen first appears on the System Manager PC's web browser when a connection is made.



Explanation of the screen

- (1) User ID entry field
- (2) Password entry field
- (3) Login button

How to Log in

1. Start the Web browser and enter the IP address of the PC running the System Manager.
2. Enter the User ID and Password, then press the 'Login' button to log in. The user must have previously been registered with a level of authority (see Page 4-49, 'User Settings'). The operation screen differs depending on the level of assigned authority.

Level of Authority

- Administrator: Allowed to access all system operations.
- Maintenance: Allowed to access all operations except system settings.
- User: Only allowed to operate the microphone console screen.

NOTE:

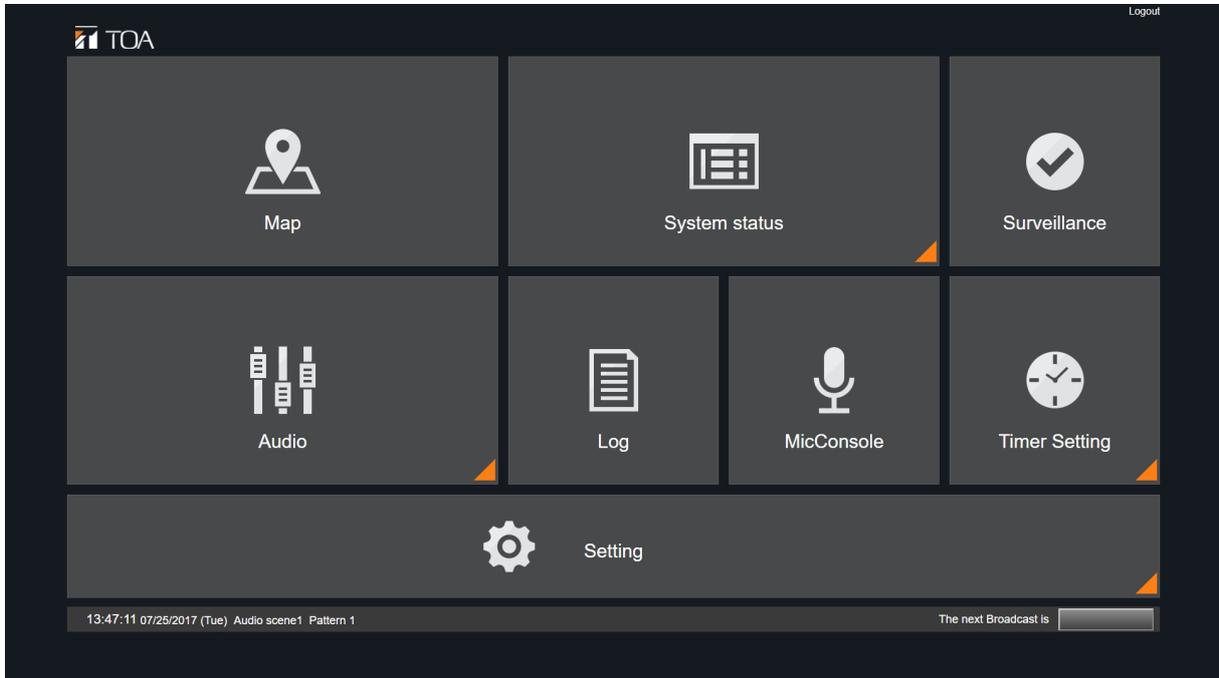
Default User ID: 'admin'

Default password: 'admin'

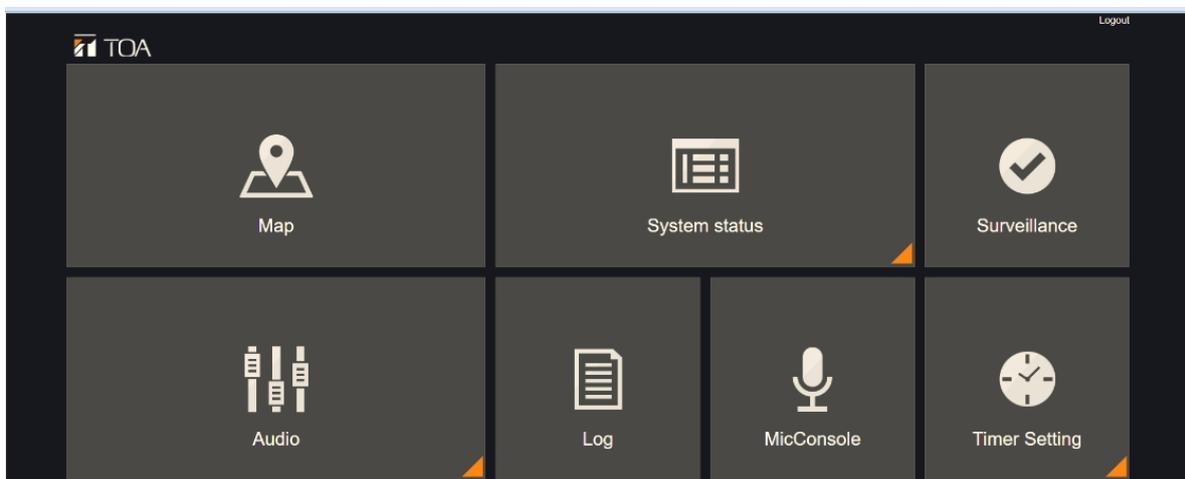
Home Screen

This screen first appears when a user logs in to the System Manager PC from a web browser.

(When logged in with Administrator authority)



(When logged in with Maintenance authority)



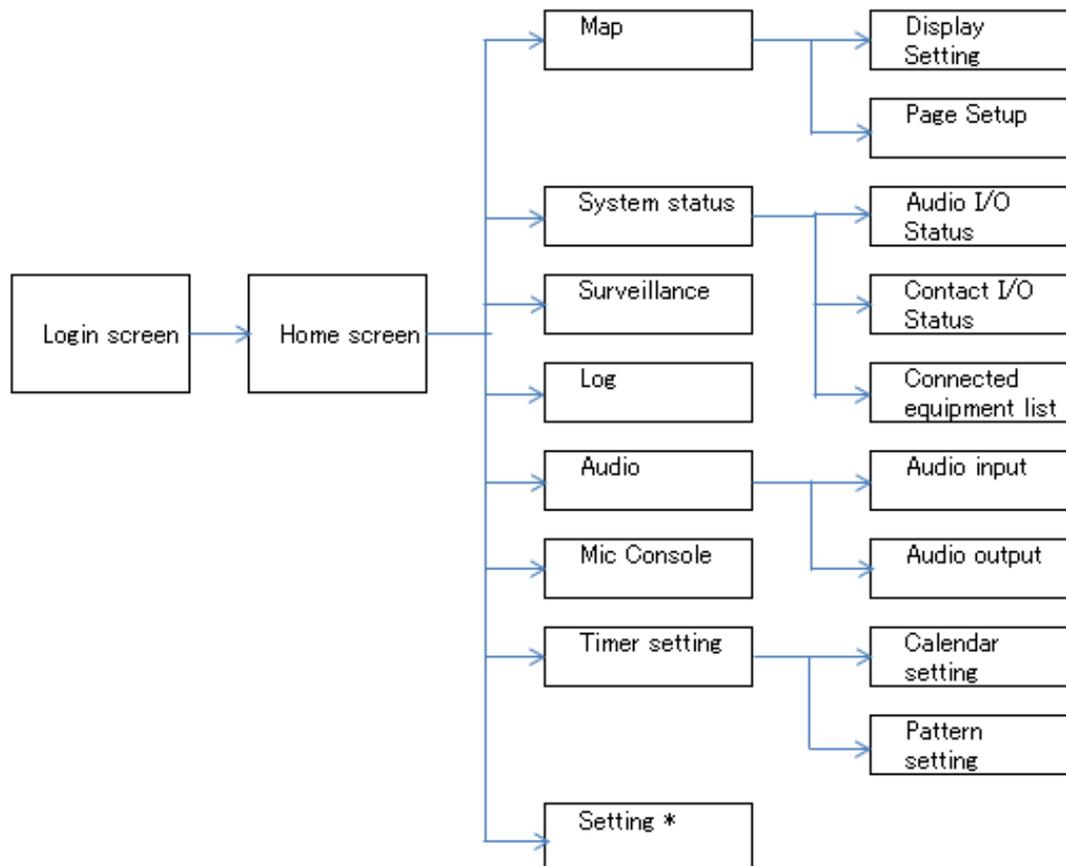
Screen Explanation

- (1) Screen selection panel: Selecting a panel causes the screen to change.
- (2) Logout: Logs out of the screen.

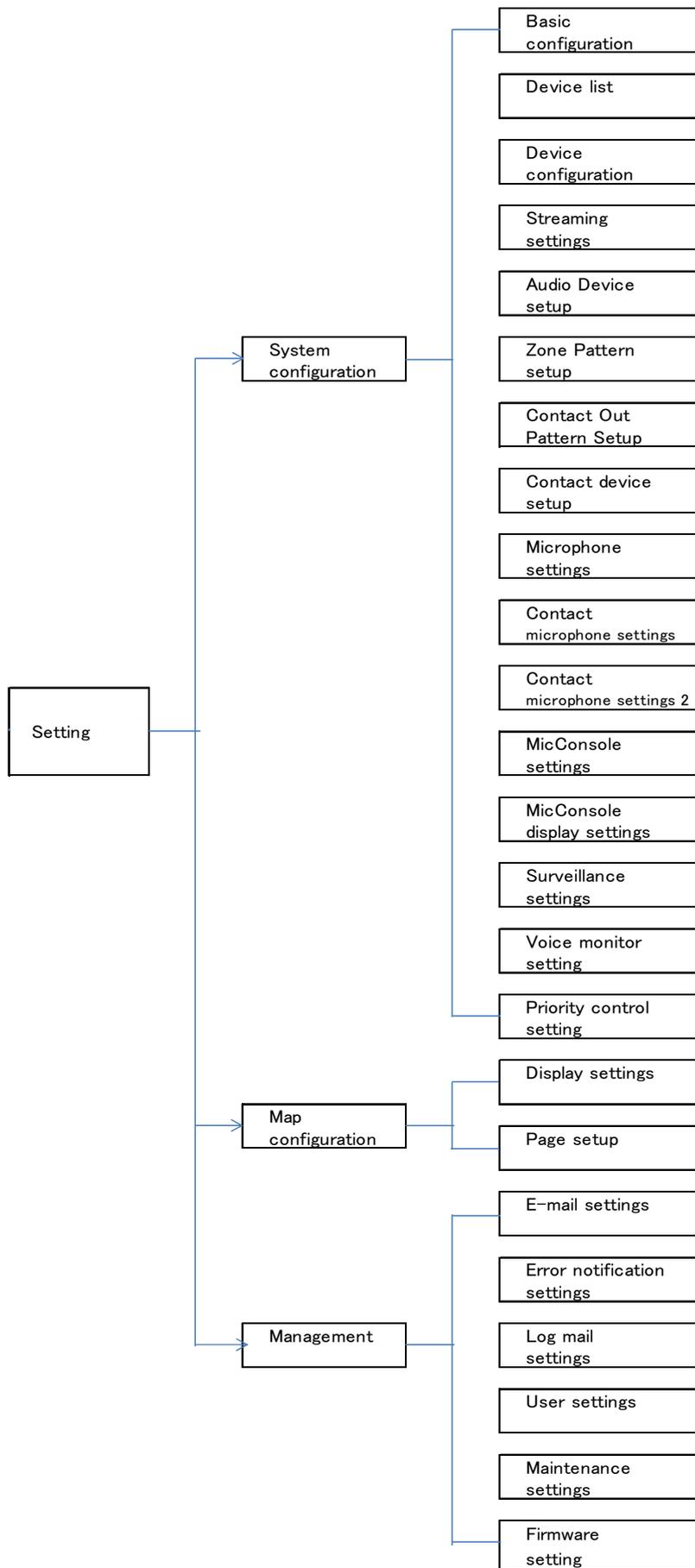
2. MENU CONFIGURATION

Administrator Authority

Shown below is the configuration of pages an Administrator can access. Administrators can access all operations.



* Not displayed when logged in with Maintenance authority.



* Not displayed when logged in with Maintenance authority.

Maintenance Authority

Maintenance Authority is the configuration that results from excluding the 'System Settings' from the Administrator's menu configuration.

User Authority

Only the microphone console is the screen configuration that a user with User authority can open.



System Setting Menu

Category	Menu	Setting Content
System configuration	Basic configuration	Set all basic information regarding the system settings.
	Device list	Register all components connected to the system and display them in list form.
	Device configuration	Set the purpose of use and operation of each component's audio channels.
	Streaming settings	Set the equipment group and multi-cast address for multi-cast audio streaming.
	Audio Device setup	Set the control method for the sound source components connected to the system equipment.
	Zone Pattern Setup	Set the zone to group.
	Contact Out Pattern Setup	Perform settings that allow broadcasts to continue when a make control signal is received at the equipment's control input.
	Contact device setup	Set the contact starting device to an specific audio input channel.
	Microphone settings	Set whether to use the microphone as a 'contact microphone' or 'web microphone' for the equipment's audio input.
	Contact microphone settings	Set the functions of the microphone to be used as a 'contact microphone.' Regarding the IP-300RM, perform its settings on the Remote Microphone Settings screen.
	Contact microphone settings2	Set the functions of the microphone to be used as a 'contact microphone.' Regarding the IP-300RM, perform its settings on the Remote Microphone Settings screen.
	Mic Console settings	Set the screen or functions of the 'web microphone' to be used. Regarding the microphone console, perform its settings on the Microphone Console Settings screen.
	Mic Console display settings	Set the status color for each button on the microphone console screen.
	Surveillance settings	Set the contact with which the component is notified should the System Manager PC or an amplifier fail.
	Voice monitor settings	Set the Audio Monitor function.
Priority control settings	Set priority operations and broadcast restriction times according to broadcast classification.	
Map configuration	Display settings	Set the status display color of the map screen.
	Page setup	Set the operation of the map screen.
Management	Email settings	Perform mail server settings.
	Error notification settings	Set the method and content of notification when an error occurs.
	Log mail settings	Set the function of notifying the system log contents by email.
	User settings	Set information on the users capable of logging into the system.
	Maintenance settings	Adjust the component's clock and set log collection intervals.
	Firmware settings	Carry out all equipment firmware updates.

System Settings Information

- When using the system for the first time, log in as Administrator to access each item on the System Settings screen.
- After system settings are completed, they can be set again by selecting 'System Settings' → 'Edit' in the menu.
- There are 'New' and 'Edit' for settings.
 - New: Performs new settings.
 - Edit: Changes the previously set contents.
(Note that when nothing has been previously set, settings need be performed from the start using the 'New' setting.)
- 'Setting Import/Export': Imports or exports all system setting contents.

System Settings panel on the Home screen

Layout During System Setting

The basic setting screen configuration is as follows:

Returns to the Home screen.

The screenshot shows the TOA system setting interface. The top header includes the TOA logo and navigation options: Map, System status, Surveillance, Audio, Log, MicConsole, TimerSetting, and Setting. The left sidebar contains a list of settings categories, with 'Microphone' highlighted. The main content area displays configuration for 'AF1' and 'AF2' channels. It includes two tables: 'Device within the channel' and 'Device within the channel' (repeated). The 'Device within the channel' table lists devices with columns for Device type, Device name, IP address, MAC address, Voice input name, Classification, Priority, FIFO time(sec), Gain(dB), FI time(sec), and FO time(sec). The second table lists devices with columns for Audio output name, Classification, Speaker name, and Contact output. A 'Contact' list on the right side shows contact names from Kiban0000 to Kiban0014. At the bottom, there are 'Back' and 'Save' buttons. The status bar at the bottom shows the time '14:32:50 07/25/2017 (Tue) Audio scene1 Pattern 1' and 'The next Broadcast is'.

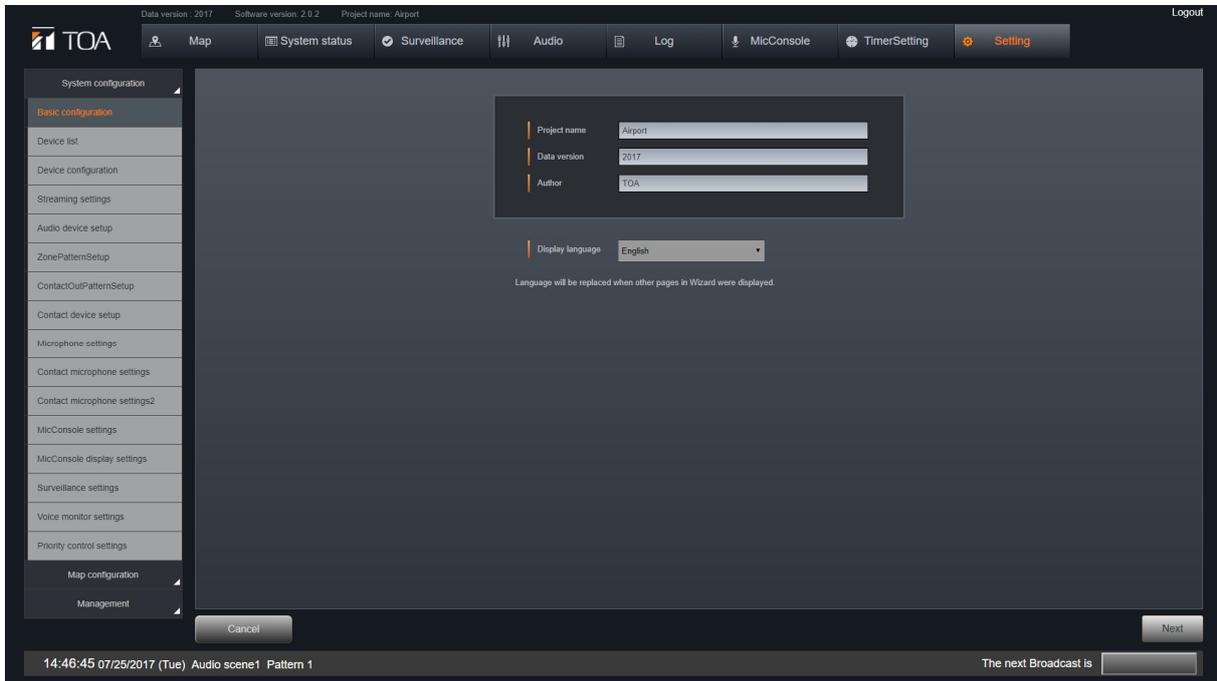
Screen Explanation

- (1) Setting wizard navigation: Displays the list of setting items
- (2) Header menu
- (3) 'Return' button: Moves to the previous setting item.
- (4) 'Next' button: Moves to the next setting item.
- (5) Setting item contents

3. SYSTEM CONFIGURATION

Basic Settings

Set basic information regarding system settings.



Item	Description
Project name	Enter an arbitrary project name
Data version	Enter an arbitrary data version.
Creator	Enter a creator.

Setting Method

Enter and save the necessary item.

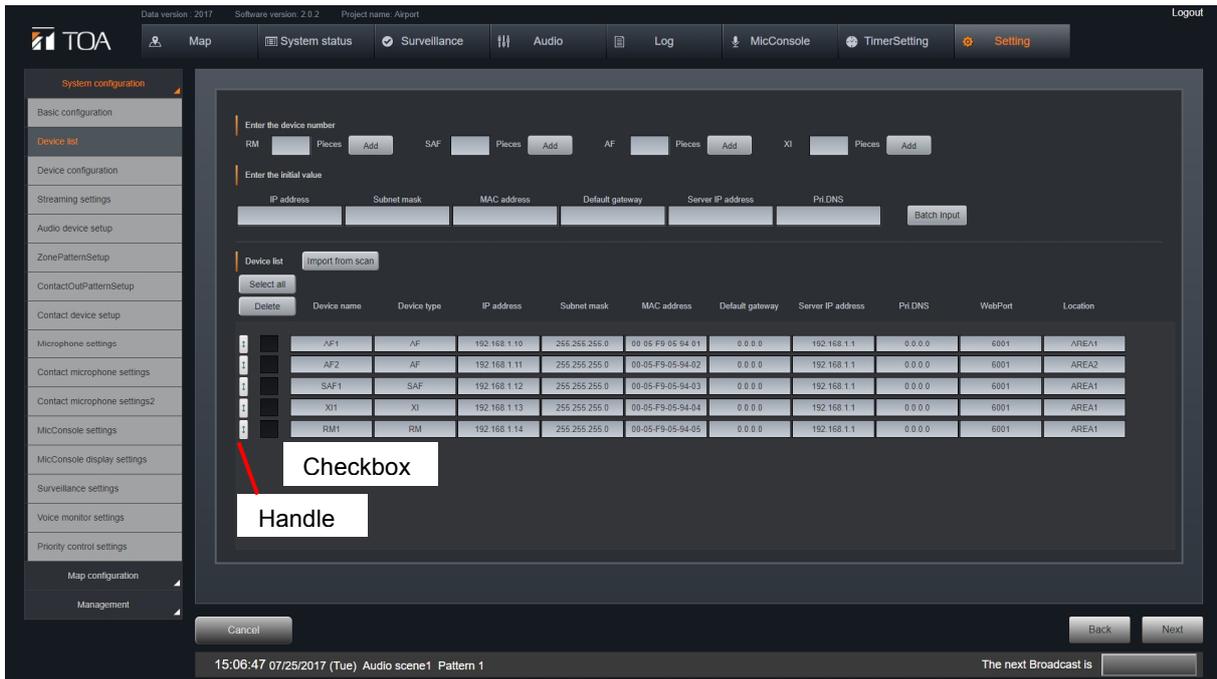
Operation Buttons

Cancel: Reverts to the Home screen without saving any setting.

Next: Advances to the 'Equipment List' screen.

Device List

Components to be connected to the system are registered and displayed in list form.



Setting Method

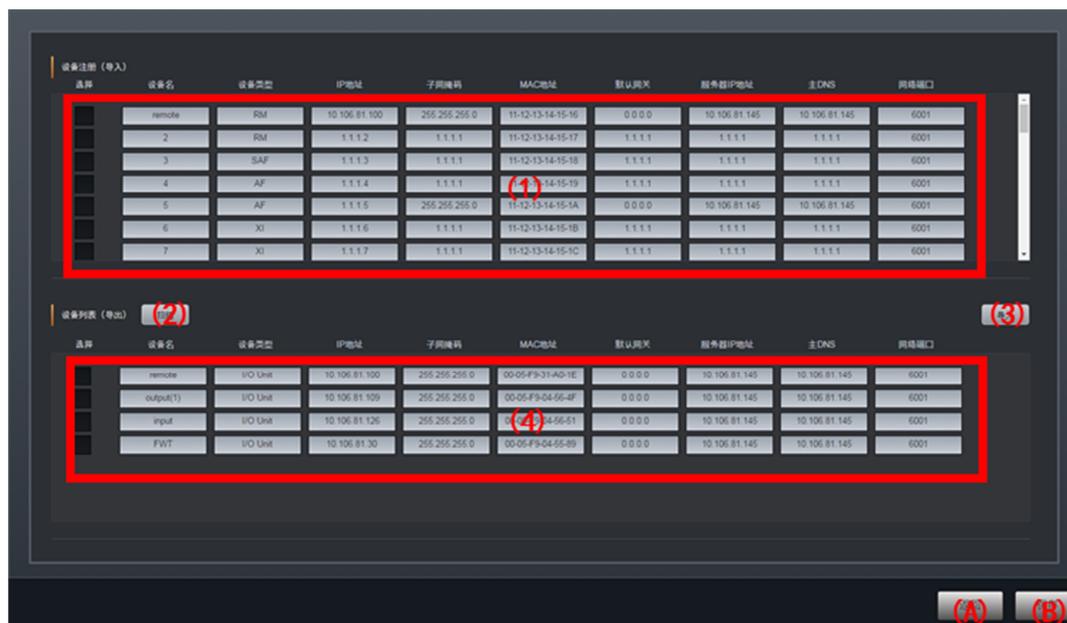
1. For equipment connected to the same network as the System Manager, click the 'Detect Equipment' button and register on the 'Detect Equipment' screen.
2. If components are not connected or if components are not detected with the 'Detect Equipment' button, register on the 'Manual Setting' screen.
3. Select the component to be set and return to the equipment list. Equipment can be sorted, and unnecessary equipment deleted, on the 'Equipment List' screen.
To sort, click on the handle located on the left of each component and drag it up or down.
To delete, click on the checkbox located at the left of each component, then click the 'Delete' button above the list.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any settings.
Next: Advances to the 'Equipment Settings' screen.
Return: Reverts to the 'Basic Setting' screen

Equipment Detection

This function detects and registers all components connected to the same network as the System Manager.



Page Introduction

- (1) Device been added Added device list
- (2) Scan
- (3) Import
- (4) Scanning list
- (A) Back
- (B) Next

Settable Items

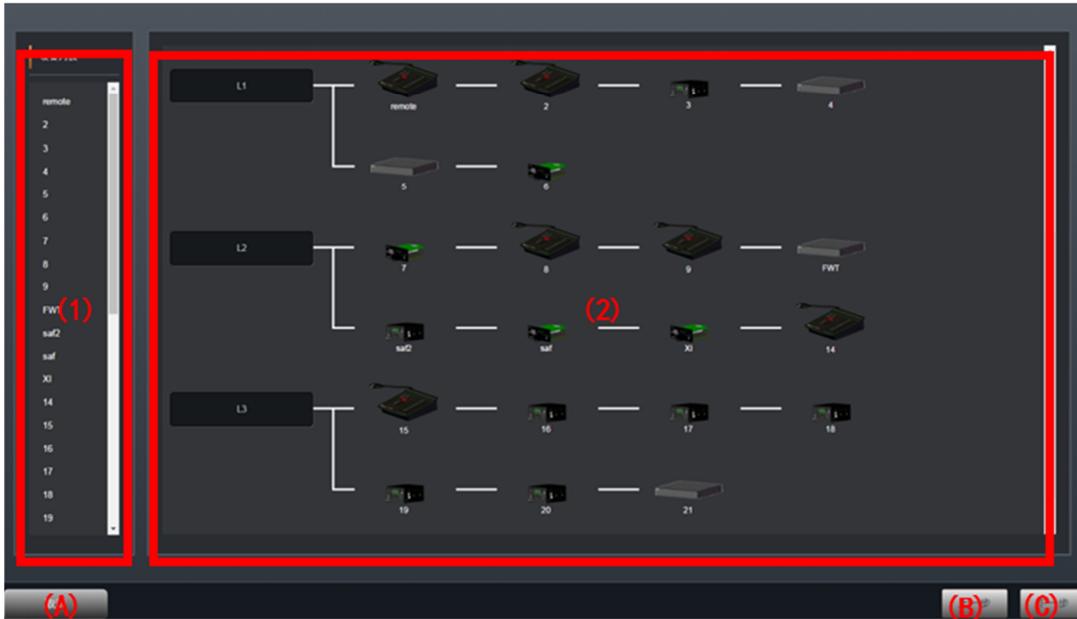
- 1. Import the MAC addresses
- 2. Edit the devices information

Setting Method

- 1) Click "Scan" to display the list of connected devices.
- 2) Tick the rows from the added device list and the rows from the scanned list of devices, then click "Import".
The MAC address of the scanning devices will be filled into the added device list.
- 3) Click "Save" after finishing the import to save the page and return to the "Device List".
- 4) Click "Return" to return to the "Device List" page without saving any changes.

Note: 1. If you do not choose any import data or export data, message "Please select the scanning list (export) and added device list(import)" will be popped up with the action of clicking "Import".
2. If the same MAC address is imported into different devices, message "Cannot import the same MAC address" will be popped up.

Device Configuration



Page Introduction

- (1) Device list
- (2) System connection
- (A) Cancel
- (B) Back
- (C) Next

Settable Items

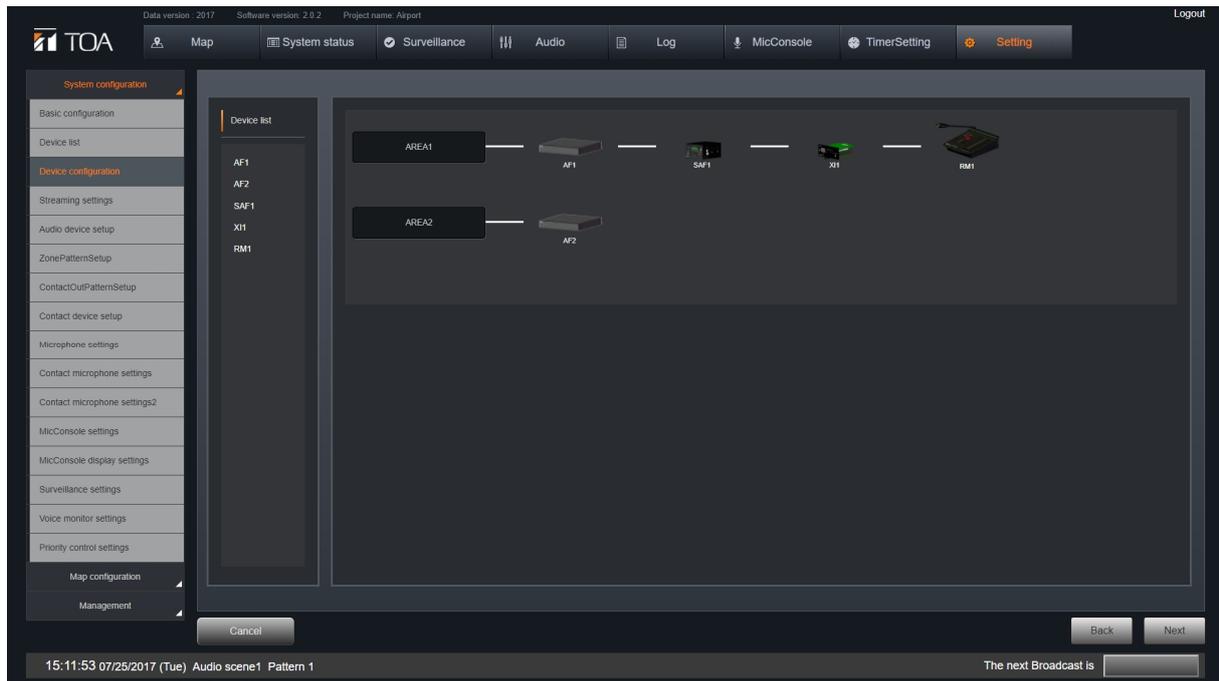
1. Enter 'Device advanced Settings' page

Setting Method

- 1) Click on a device list or any device in the device connection graphics to enter the "Device advanced settings" page

Device Advance Settings

Set the purpose of use and operation of each component's audio channel.



Item	Description
Audio Input Name	Use these items to input each name within the equipment in batches. If the 'Copy' button is clicked after a name is entered, consecutive numbers beginning with '1' are automatically assigned to the end of the name entered.
Audio Output Name	
Speaker Name	
Contact Input Name	
Contact Output Name	
Contact Input Name	Enter an arbitrary name
Contact Output Name	Enter an arbitrary name
Audio Input Name	Enter an arbitrary name
Classification	Select the input classification (BGM, General Purpose, Emergency, or Monitor).
Priority	The setting range differs depending on the contents selected in 'Classification.' The smaller the number, the higher the broadcast priority.
FI/FO Time (second)	Set the fade-in time for when a BGM broadcast begins and the fade-out time for when it ends. The set contents are enabled when BGM is selected in 'Classification.'
Gain (dB)	Set the attenuation volume (Gain) and attenuation time (FI time) for when BGM broadcast is interrupted by a general-purpose broadcast, and the attenuation restoration time (FO time) for when the general-purpose broadcast is finished. The set contents are enabled when BGM is selected in 'Classification.'
FI Time (second)	
FO Time (second)	
Audio Output Name	Enter an arbitrary name
Speaker Name	Enter an arbitrary name
Classification	Select either Amplifier or Monitor.
Contact Output	Set the contact output for speaker selector control. Perform this setting when the 'Amplifier' classification is selected and 2 or more speakers are connected.

Setting Method

Select equipment from the Equipment List box and perform the following settings:

1. Set the audio input channel.
[For IP-3010AF]
Set each of Channels 1 – 4.
[For IP-300RM]
 - Set each of Channels 3 and 4. (Channels 1 and 2 are not used.)
 - Microphone input is Channel 3 and external input is Channel 4.
2. Set the audio output channel. (IP-3010AF only)
 - Set each of Channels 1 – 4.
 - If the 'Amplifier' classification is selected, set 'Speaker' as well. 'Speaker' can be set for up to 16 pieces per amplifier. Up to 16 speakers can be freely assigned to any output channel.
 - The number of entry fields can be increased with the 'Add' button. To decrease the number of entry fields, press the 'Delete' button.
 - For 'Speaker,' set the 'Speaker Name' and 'Contact Output Number.'
3. Set contact inputs and outputs.
For each of the 16 contact inputs and outputs, enter the name to be displayed on all screens.

Use of Initial Values

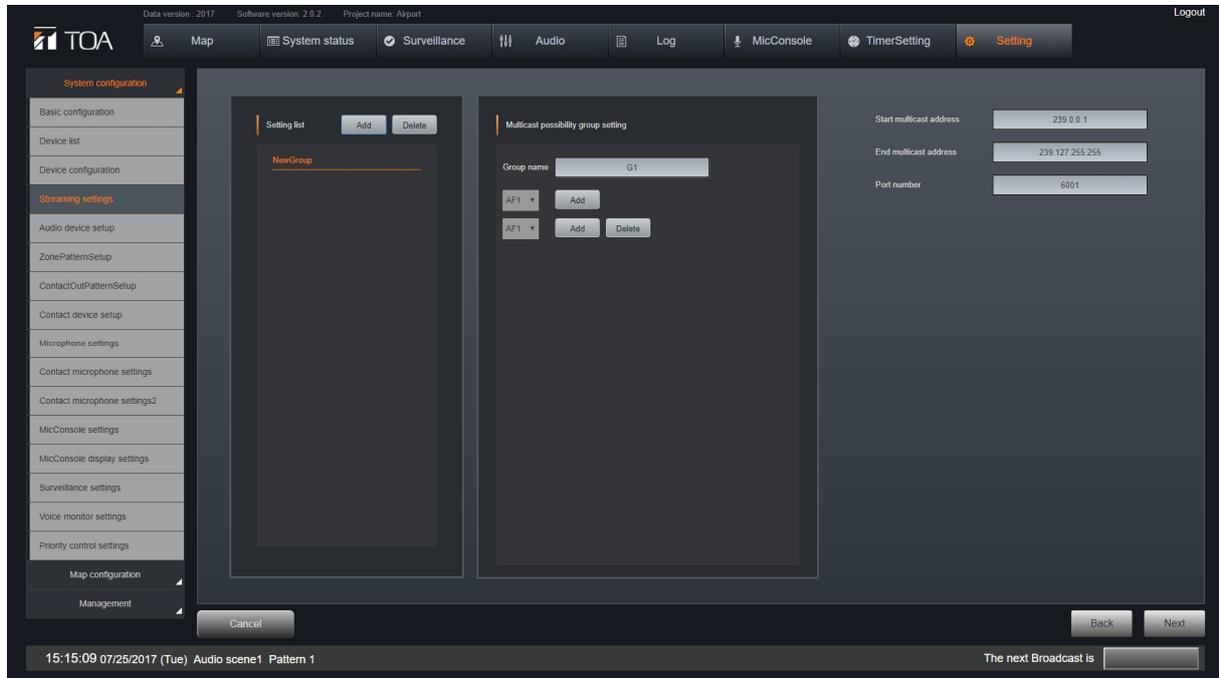
- Enter the contents to be set as initial values in 'Equipment Name,' 'Audio Input Name,' 'Audio Output Name,' 'Speaker Name,' 'Contact Input Name' and 'Contact Output Name' fields located in the upper part of the screen, then click the 'Copy' button. The initial values are entered in their corresponding fields.
- Initial value information can be cleared with the 'Reset' button.
- It is also possible to directly write initial value information to individual information fields.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any settings.
Next: Advances to the 'Streaming Settings' screen.
Return: Reverts to the 'Equipment List' screen.

Streaming Settings

- Set an equipment group and multicast address when performing multicast audio streaming.
- The maximum number of audio streaming channels that a single component can handle is 4. When the number of streaming channels exceeds this limit, streaming settings are required.



Item	Item Description
Group Name	Enter an arbitrary name.
Registered Equipment Setting	Set equipment to be registered to a group
Multicast Starting Address	Set the multicast address range used by the group.
Multicast Ending Address	
Port Number	Set the multicast address port numbers used by the group.

Setting Method

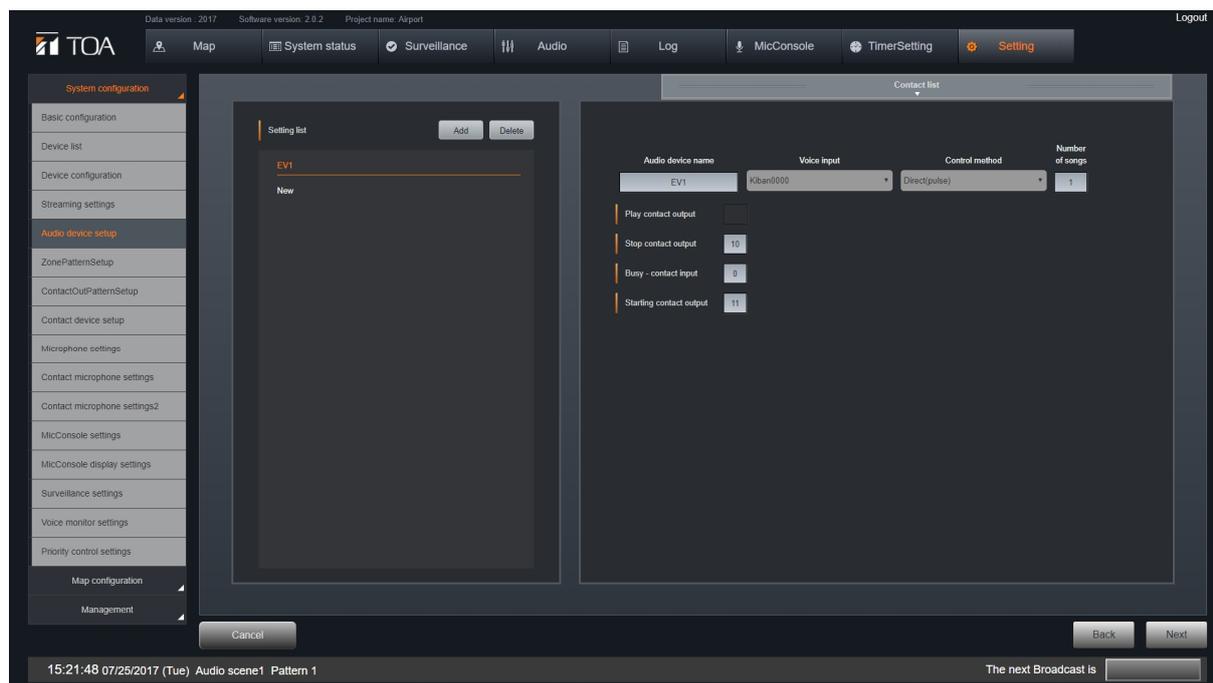
1. Select the group from the Setting List box.
 - A new group is added to the list if the 'Add' button is clicked.
 - Click the 'Delete' button to delete a selected group from the list.
2. Set the equipment to be registered to the group in the Multicast Group Setting box.
 - The number of equipment can be increased or decreased with the 'Add' or 'Delete' buttons located to the right of the equipment name.
 - Select equipment from among those registered to the system.
3. Enter details in each streaming setting input field on the right of the screen.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Playing Equipment Settings' screen.
Return: Reverts to the 'Equipment Settings' screen.

Audio Device Setup

Perform connection settings between the IP-3010AF interface and the component connected to the IP-3010AF.



Item	Description
Playing Equipment Component Name	Enter an arbitrary name
Audio Input	Select the interface's audio input channel.
Activation Method	Select from 'Binary (pulse)', 'Binary (level)', 'Direct (pulse)' and 'Direct (level).'
Musical Numbers	Enter the number of musical pieces
Playback Contact	Set the IP-3010AF's contact output for connection to the playing equipment's contact input. Note : this setting is enabled only when the activation method is set to 'Binary (pulse)' or 'Binary (level).'
Stop Contact	Set the IP-3010AF's contact output for connection to the playing equipment's contact input. Note: that this setting is enabled only when the control method is set to 'Binary (pulse)' or 'Direct (pulse).'
Busy Contact	Set the IP-3010AF's contact input for connection to the playing equipment's busy output.
Activation Contact	Set the IP-3010AF's contact output for connection to the playing equipment's contact input.

Setting Method

Assign the playing equipment to the audio input channel.

- Select the playing equipment on the Setting List screen.
 - Playing equipment components are added to the list when the 'Add' button is clicked.
 - Click the 'Delete' button to delete the selected playing equipment component from the list.
- Perform settings on the setting entry screen that appears on the right side when a playing equipment component is selected on the Setting List screen
- Enter the playing equipment component name.
- Audio input: Select the audio input channel to be connected to the playing equipment from the dropdown list.
- Activation method: Select the playing equipment activation method from the dropdown list.

Selection Item and Contents

Selection Item	Contents
(Select)	Equipment that do not require control.
Binary (pulse)	Controls the playing equipment that plays back the sound source designated to be played back when its corresponding contact activation input receives a pulse make signal for playback..
Binary (level)	Controls the playing equipment that plays back the sound source designated to be played back while its corresponding contact activation input is receiving a make signal for playback.
Direct (pulse)	Controls the playing equipment that plays back the sound source assigned to any contact activation input when it receives a make pulse signal.
Direct (level)	Controls the playing equipment that plays back the sound source assigned to any contact activation input while it is receiving a make signal.

6. Set the musical tracks to use.
When the control method is (select), enter '1.'
7. Set the playback contact, stop contact, activation contact and busy contact.
If each input field is clicked, the contact auxiliary dialog is opened (see the next page).
The contact items (○: Required), ×: not required) that require the setting method and setting are as follows:

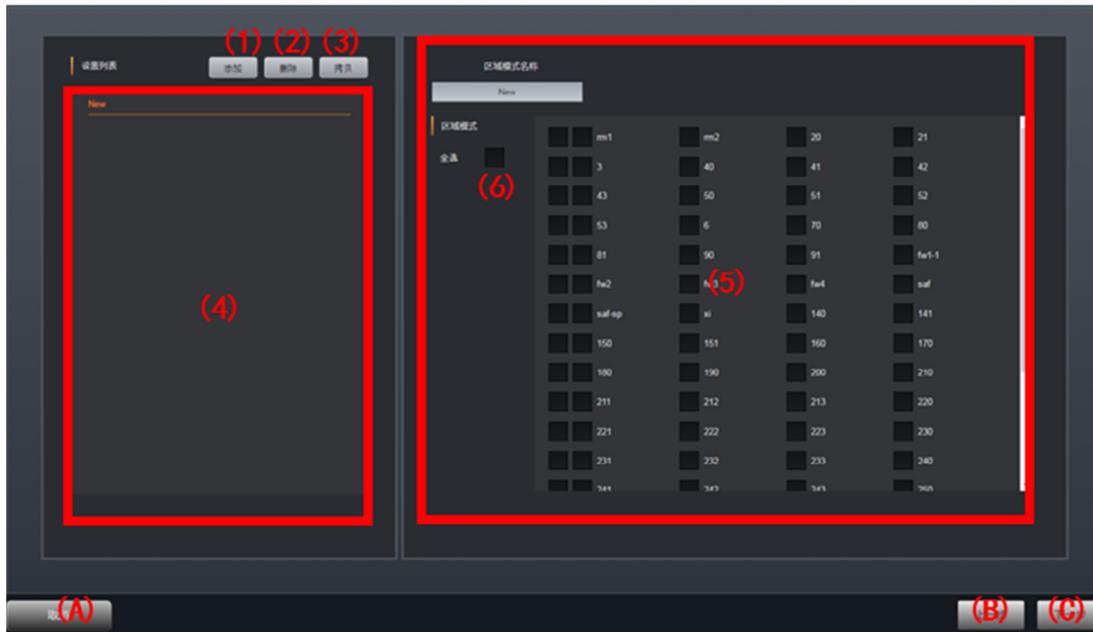
<u>Control Method</u>	<u>Playback Contact</u>	<u>Stop Contact</u>	<u>Activation Contact</u>	<u>Busy Contact</u>
(select)	×	×	×	×
Binary (pulse)	○	○	○	○
Binary (Level)	○	×	○	○
Direct (pulse)	×	○	○	○
Direct (level)	×	×	○	○

8. Click the 'Delete' button at the upper part of the Setting List screen to delete the contents of playing equipment settings.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
 Next: Advances to the 'Contact Activation Equipment Settings' screen.
 Return: Reverts to the 'Streaming Settings' screen.

Zone Pattern Settings



Page Introduction

- (1) Add
- (2) Delete
- (3) Copy
- (4) Setting list
- (5) Setting input
- (6) All
- (A) Cancel
- (B) Back
- (C) Next

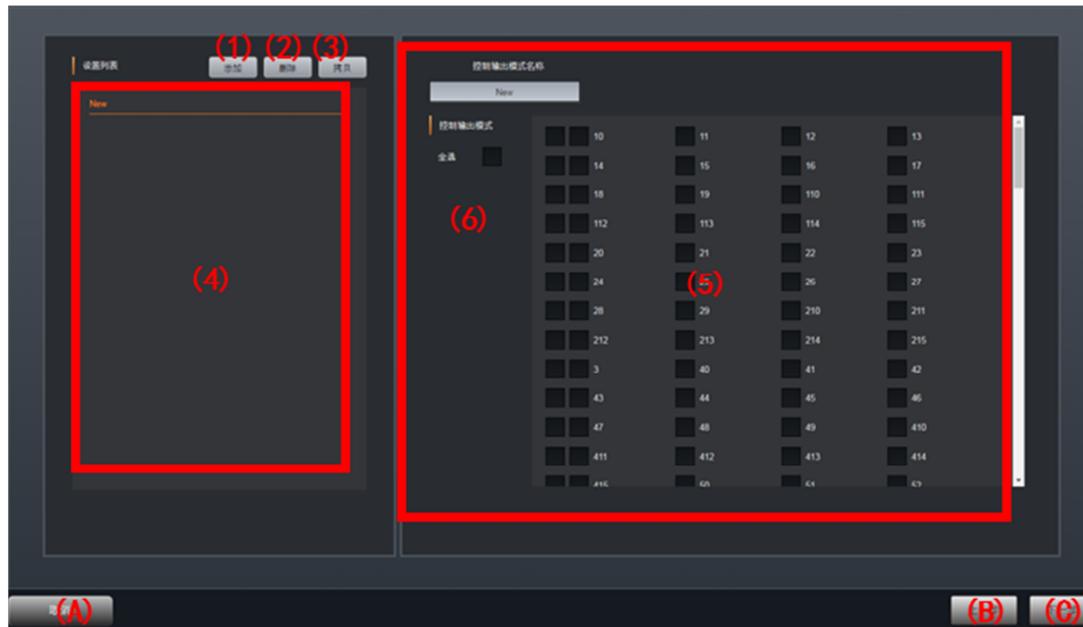
Settable Items

- 1. Zone pattern name
- 2. Zone pattern

Setting Method

- 1) Set some zone to a group.
- 2) In the setting list on the left side of the page, press "Add" to create a new zone pattern.
- 3) Select a zone pattern name in the list and set it in the right page.
- 4) Check the zones you want to add in the settings input field.
- 5) Use "Delete" above the setting list to delete the patterns.
- 6) Select a zone pattern name and click "copy" to copy the setting of selected pattern.
- 7) Click "Next" to enter the "Control output pattern settings" page after all the settings are complete

Contact Output Pattern Settings



Page Introduction

- (1) Add
- (2) Delete
- (3) Copy
- (4) Setting list
- (5) Setting input
- (6) All
- (A) Cancel
- (B) Back
- (C) Next

Settable Items:

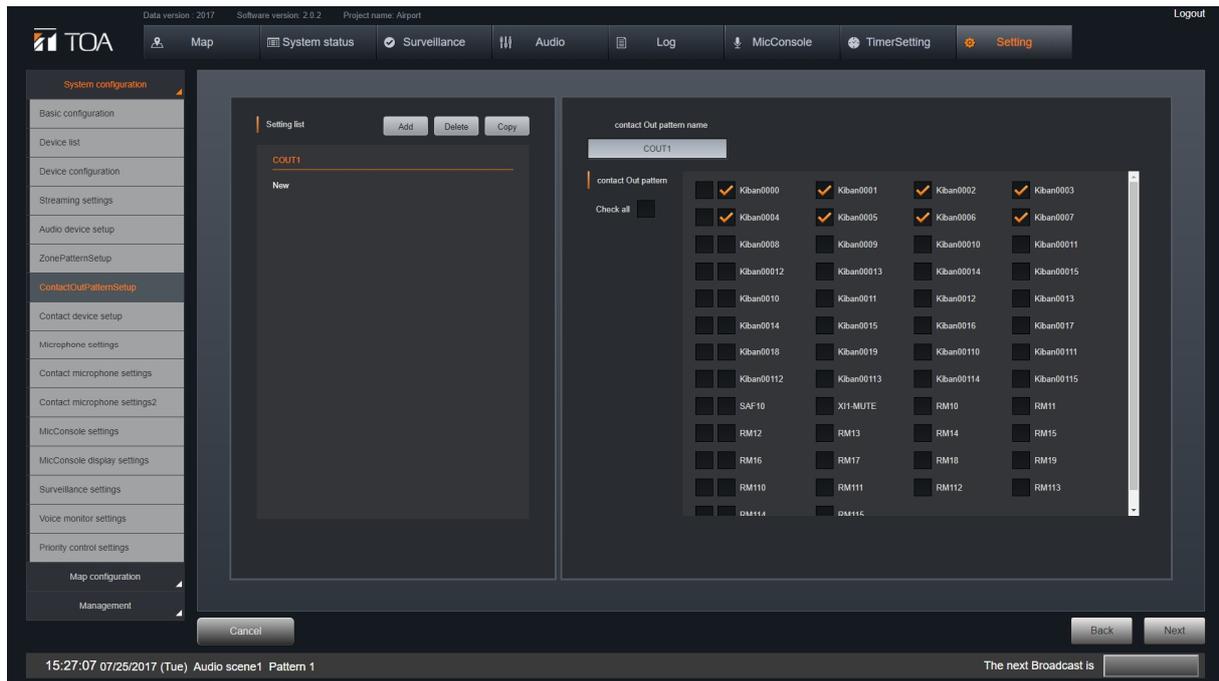
1. Control output pattern name
2. Control output pattern

Setting Method

- 1) Set some control output into a group.
- 2) Click "Add" in the setting list on the left side of the page to create a new pattern.
- 3) Select a pattern name in the list and set it in the right page.
- 4) Check the control outputs you want to add in the settings input field.
- 5) Use "Delete" above the setting list to delete the patterns.
- 6) Select a pattern name and click "copy" to copy the setting of the selected pattern.
- 7) Click "Next" to enter the "Contact device setup" page after all the settings are complete

Contact Device Setup

Perform settings to allow broadcasting while the equipment's contact input receives a 'make' control signal.



Item	Description
Contact-activate equipment name	Enter an arbitrary name.
Audio input	Select the equipment's audio input channel.
Activation contact input	Set the contact inputs to receive a control signal.
Broadcasting destination checkbox	Select the destinations to which a broadcast is made while the activation contact input is closed.
Select all broadcasting destinations	Select all broadcasting destinations.
Contact output destination checkbox	Select the contact output destination while the activation contact input is closed.
Select all contact output destinations	Select all contact output destinations.

Setting Method

Assign the contact-activated equipment to an audio input channel.

1. Select the contact-activated equipment from the Setting List box.
 - The contact-activated equipment is added to the list when the 'Add' button is clicked.
 - If the 'Delete' button is clicked, the selected playing equipment is deleted from the list.

2. Set the contact-activated equipment.

Selecting the contact-activated equipment from the Setting List box allows settings to be performed on the right-side screen.

NOTE:

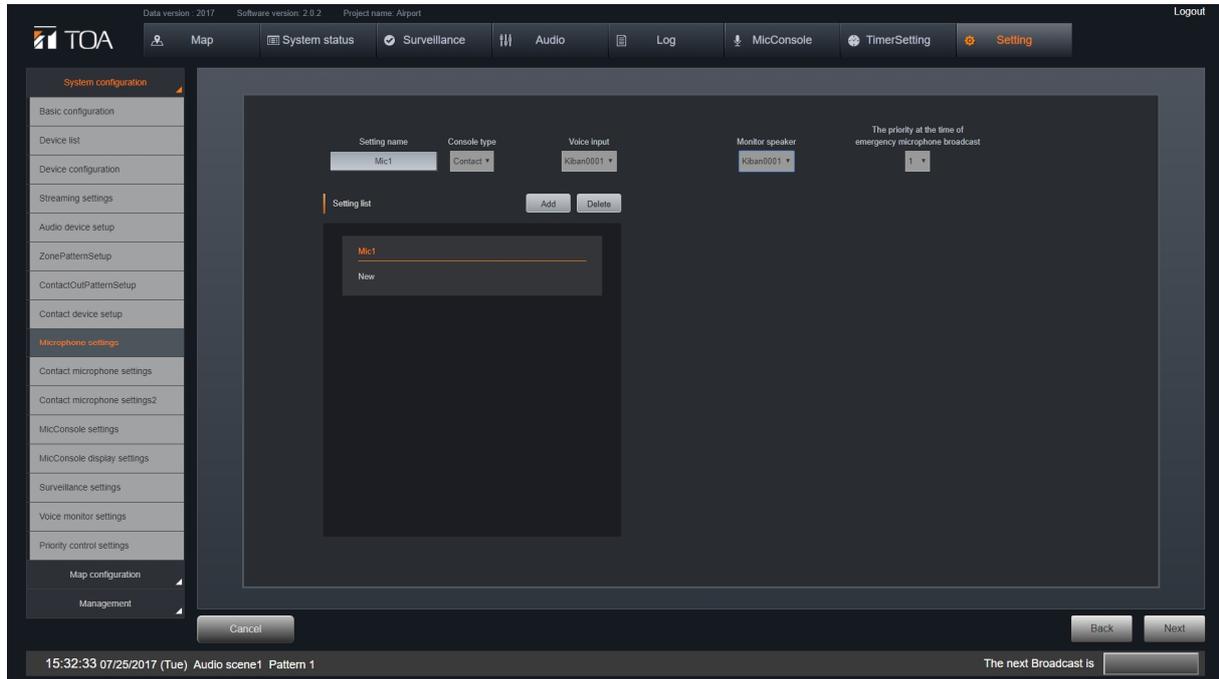
Broadcasts cannot be made to equipment with channels designated in the Audio Input settings. Avoid designating such equipment as broadcasting destinations.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Microphone Settings' screen.
Return: Reverts to the 'Playing Equipment Settings' screen.

Microphone Settings

Set whether to use the microphone as a 'contact microphone' or 'web microphone' for the equipment's audio input.



Item	Description
Microphone Name	Enter an arbitrary name
Microphone Classification	Select either 'Contact' or 'Web.' Contact: Select when using the IP-300RM or the IP-3010AF's contact input. Web: Select when using the microphone console screen.
Audio Input	Select the audio input channel of the component to be used as a microphone input. In the case of the IP-300RM, select audio input channel 3.
Monitor Output	Select the audio output channel of the component to be used as a monitor speaker. This output is also used for monitoring the chime tone. In the case of the IP-300RM, select audio output channel 4.
Priority when emergency broadcast is initiated	Select the priority.

Setting Method

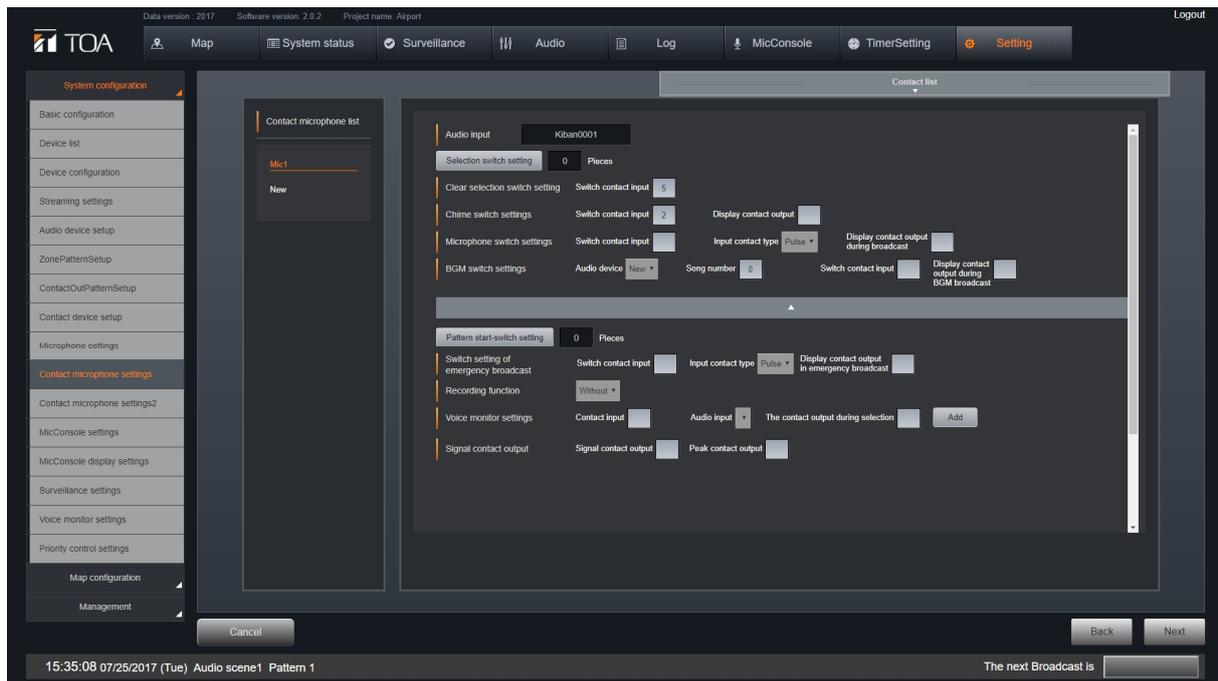
- Select the microphone from the Setting List box.
 - Microphones are added to the list when the 'Add' button is clicked.
 - When the 'Delete' button is clicked, the selected microphone is deleted from the list.
- Set the microphone.
Selecting the microphone from the Setting List box allows settings to be performed on the upper screen.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Contact Microphone Settings' screen.
Return: Reverts to the 'Contact-Activated Equipment Settings' screen.

Contact Microphone Settings

Perform settings for using the 'Contact Microphone.' For the IP-300RM, use the following screen:

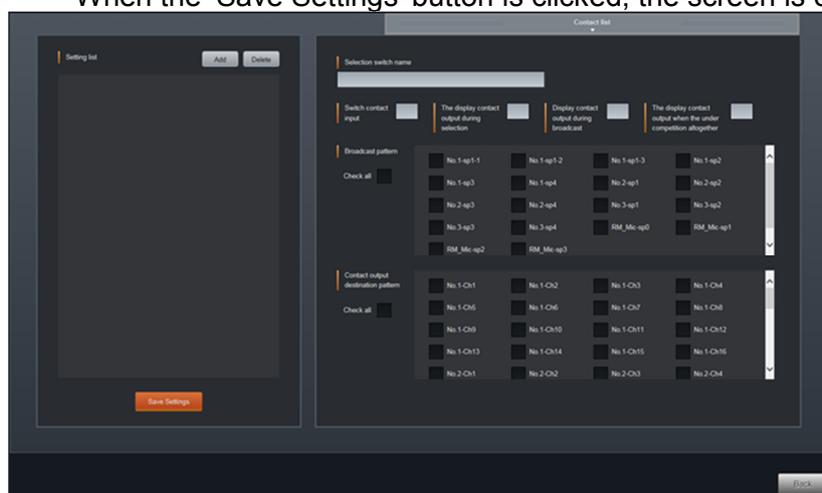


Item		Description
Cancel All Broadcasting Destination SW settings	SW Contact	Set the switch that cancels all broadcasting destination settings
Chime SW settings	SW Contact	Set the switch that designates whether or not to sound a chime tone
	SW-LED Contact	Set the chime enable or disable indications, and also the chime status indications.
Microphone SW settings	SW Contact	Set the switch for starting microphone broadcasts.
	Contact classification	Select either 'Lock' or 'Non-lock.'*
	Contact for Broadcast In-progress LED	Set the microphone broadcast status indications
External input SW settings	Playing Equipment	Select the playing equipment (from among those set on the 'Playing Equipment Settings' screen).
	Musical Numbers	Enter the musical numbers (enter the musical number range set on the 'Playing Equipment Settings' screen).
	SW Contact]	Set the switch to start broadcasts.
	Contact for External Input In-Progress LED[Set the broadcast status indications
Emergency microphone SW settings	SW Contact	Set the switch to start emergency broadcasts.
	Contact Classification]	Select either 'Lock' or 'Non-lock.'*
	Contact for 'Emergency Broadcast In-Progress' LED	Set the emergency broadcast status indications.
Recording function		Select either 'Enable' or 'Disable.'
Recording In-Progress LED settings	SW-LED Contact	Set the recording in-progress status indications
Playback SW settings	SW Contact	Set the switch that plays back the recording contents.
	SW-LED Contact	Set the recording content playback status indications.
Monitor settings	SW Contact	Set the switch that selects the monitor audio input.
	Audio Input	Select the audio input channel (from among the channels for which the audio input classification has been set to 'Monitor' on the 'Equipment Settings' screen).
	SW-LED Contact	Set the 'Monitor Selection in Progress' status indications.
Signal/Peak settings	Signal-LED Contact	Set the status indications for when the microphone input level exceeds Signal level (-40 dB).
	Peak-LED Contact	Set the status indications for when the microphone input level exceeds Peak level (+8 dB).

- *Lock: Lock type. Key is locked once pressed, allowing announcements to be made. Press the key again to terminate the announcement.
- Non-lock: PTT type. Announcements can be sent while the key is held down. Releasing the key terminates the announcement.

Setting Method

1. Select the microphone from the Microphone List box.
2. Set the contact used as a switch or status display for each function.
For 'Broadcasting Destination Selection SW settings' and 'Pattern Activation SW settings,' click their respective buttons to perform settings on different screens.
- 3-1. Broadcasting Destination Selection SW settings
Set the switch that selects the broadcasting destination.
Perform the assignment of the switch to use and select the broadcasting destination and contact output destination.
When the 'Save Settings' button is clicked, the screen is closed.
- 3-2. Pattern Activation SW settings
Set the switch that starts the pattern activation.
Perform the assignment of the switch to use and select the playing equipment, broadcasting destination and contact output destination.
When the 'Save Settings' button is clicked, the screen is closed.



About the IP-300RM's individual keys and indicators

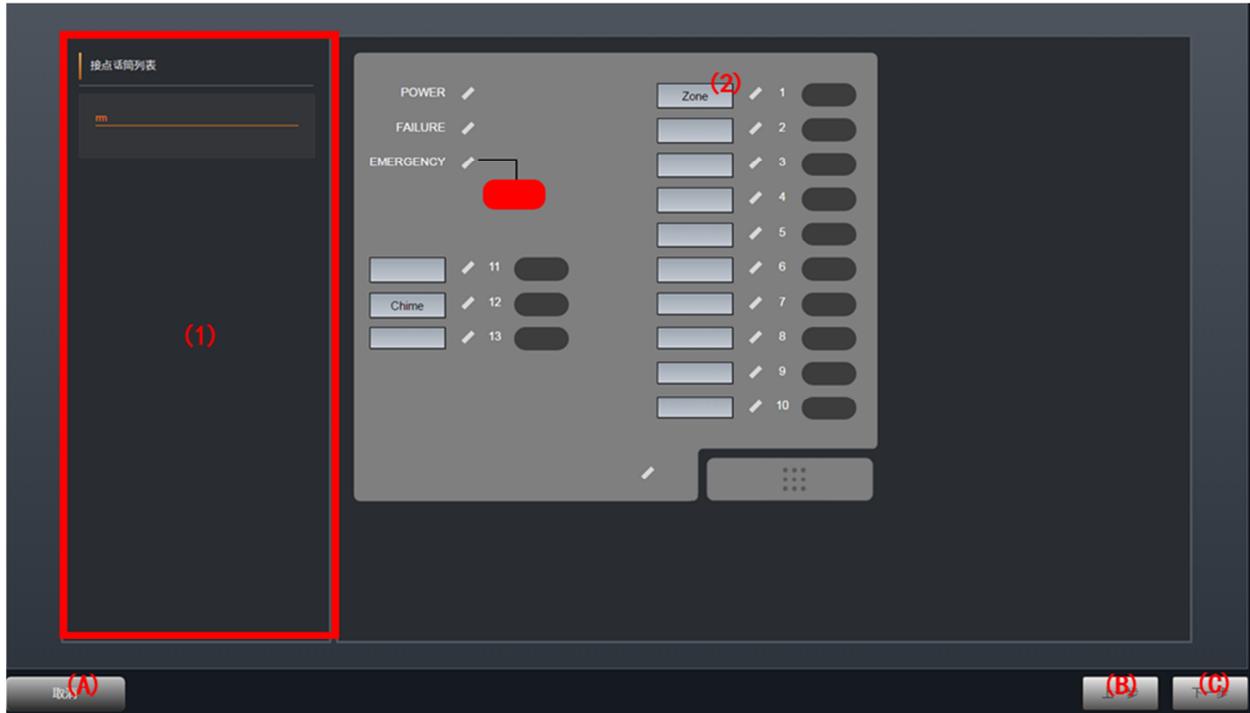
The IP-300RM's keys and indicators are handled as contact input channels and contact output channels, respectively. The relationship of each key and indicator to the contact is as follows:

Contact Input Channel	Key	Contact Output Channel	Indicator
1	Function key 1	1	Status indicator 1
2	Function key 2	2	Status indicator 2
3	Function key 3	3	Status indicator 3
4	Function key 4	4	Status indicator 4
5	Function key 5	5	Status indicator 5
6	Function key 6	6	Status indicator 6
7	Function key 7	7	Status indicator 7
8	Function key 8	8	Status indicator 8
9	Function key 9	9	Status indicator 9
10	Function key 10	10	Status indicator 10
11	Function key 11	11	Status indicator 11
12	Function key 12	12	Status indicator 12
13	Function key 13	13	Status indicator 13
14	Emergency key	14	Emergency indicator
15	Talk key	15	Status indicator 14
16	Control input terminal (rear panel of the body)	16	Failure indicator

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
- Next: Advances to the 'Microphone Console Settings' screen.
- Return: Reverts to the 'Microphone Settings' screen.

Microphone Contact Settings 2



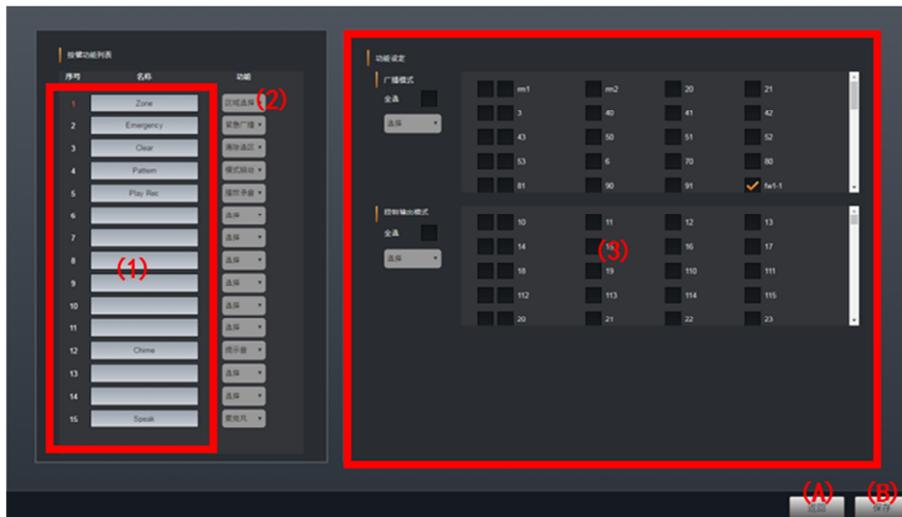
Page Introduction

- (1) Microphone contact list
- (2) Switch
- (A) Cancel
- (B) Back
- (C) Next

Setting Method

- (1) Click the switch on the microphone contact graphic to enter the "Switch Function Setting" page

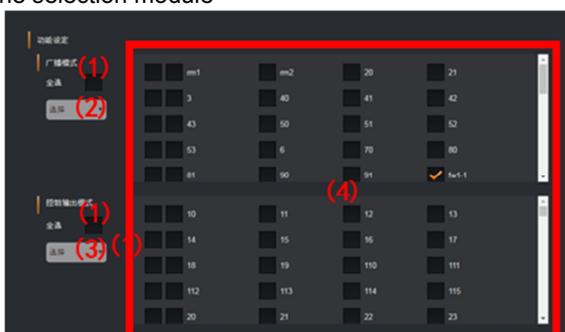
Switch Function Settings



Page Introduction

- (1) Switch list
- (2) Function
- (3) Pattern list
- (A) Back
- (B) Next

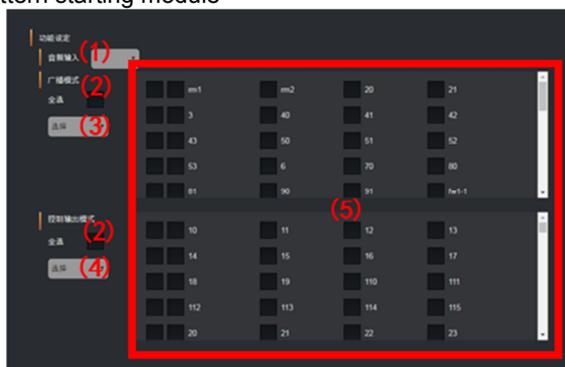
Zone selection module



Page Introduction

- (1) ALL
- (2) Zone pattern select
- (3) Control output pattern select
- (4) Setting input list

Pattern starting module



Page Introduction

- (1) Audio input select
- (2) ALL
- (3) Zone pattern select
- (4) Control output pattern select
- (5) Setting input list

Emergency broadcast module Microphone module



Page Introduction

- (1) Contact input mode select

Settable Items

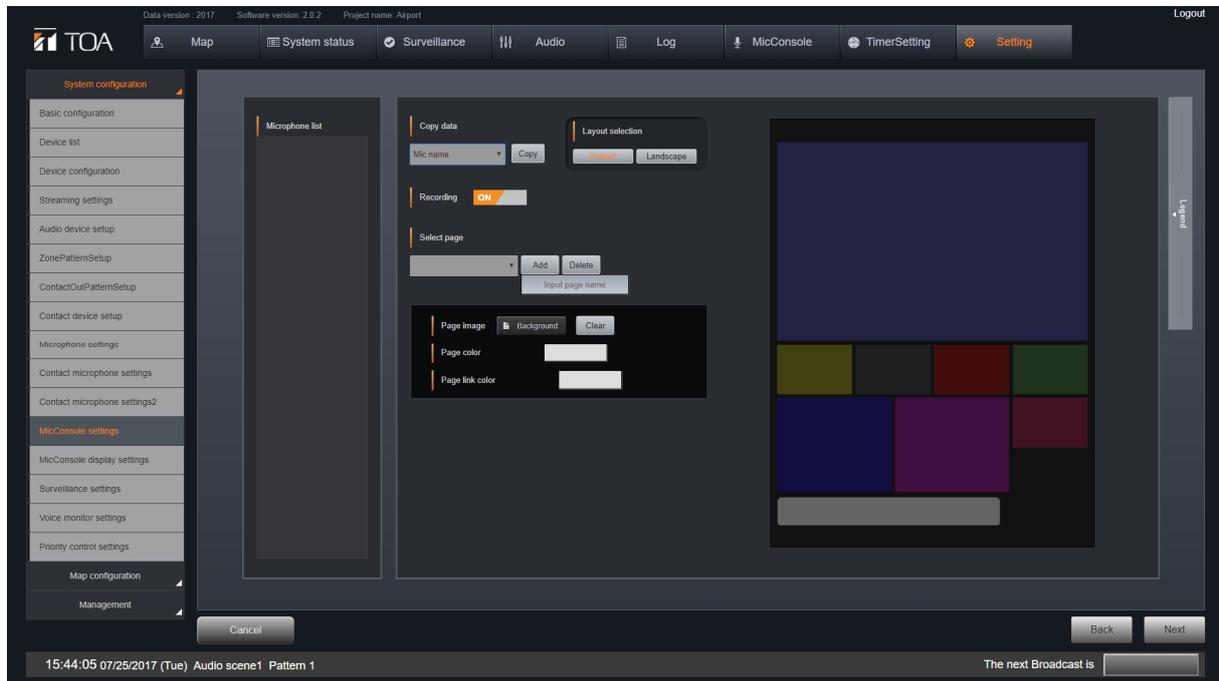
- 1.Switch name
- 2.Switch function

Setting Method

- 1) Select the specific function for a switch, then the corresponding module will be displayed on the right side.
- 2) Zone selection module:
 - 2-1. tick the selected zones' box
 - 2-2. tick the Selected control outputs' box
- 3) Pattern starting module:
 - 3-1. Select the audio input
 - 3-2. tick the selected zones' box
 - 3-3. tick the Selected control outputs' box
- 4) Emergency broadcast module, microphone module
 - 4-1. Select the contact input type
- 5) other modules, no setting is needed
- 6) click "Save" after all the switches functions are set, to save the modified setting and to return to the "Microphone Contact Setting 2" page.
- 7) Click "Return" to return to the "Microphone Contact Setting 2" page without saving any modified setting.

Microphone Console Settings

- Perform screen or broadcasting destination settings as necessary when using the microphone as a 'Web microphone.'
- Set the microphone console using this screen.



Item		Description
Data copy	Copy source name	To copy setting contents, select a microphone name to use as a copy source.
Layout Selection		Layout of the Microphone Console screen. Select either 'Vertical' or 'Horizontal.'
Recording		Enable or disable the recording function. Select either 'ON' or 'OFF.'
Page selection	Page name	Select or enter the page.
Button Selection	Broadcasting Destination Selection]	Create a button to select broadcasting destinations
	Microphone	Create a button to initiate microphone broadcasts.
	Chime	Create a button to enable or disable chime play.
	External Input]	Create a button to initiate external input broadcasts.
	Clear All Broadcasting Destination Settings]	Create a button to clear all broadcasting destination settings.
	Emergency Microphone	Create a button to initiate emergency microphone broadcasts.
	Pattern Activation	Create a button to initiate pattern activation.
	Audio Monitor	Create a button to execute Audio Monitor.
Button Indication Checkbox	Settings can be performed when the button classification is set to 'Broadcasting destination selection,' 'Pattern activation' or 'Audio monitor.' If a checkmark is placed, the button is hidden.	
Button shape, text color and font size setting box	Button Shape	Select button shape
	Line Width	Set button line width.
	Text Size	Set character color.
	Text Color	Set character color.
	Size, Height	Set button height.
Seize, Width	Set button width.	

Setting Method

- 1) Set all the microphones that controlled by MicConsole.
- 2) Select the microphone in the microphone list on the left.
- 3) Determine the page layout.
- 4) Select the edited page. When there is no edited page, click "Add" to create a a new page.
- 5) In each page, all the buttons should be set.
- 6) There are 8 kinds of button functions that can be set as needed.
- 7) Button setting includes not only display name, text color, corner style, display position, but also other additional settings.
- 8) Click "Next" after all settings are complete to enter the "MicConsole Display Settings" page.

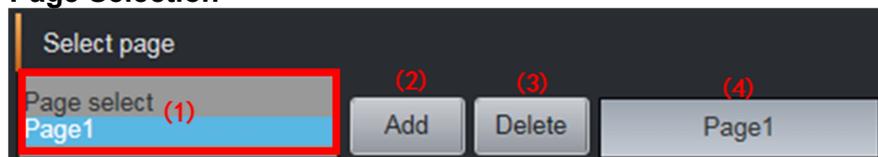
The horizontal configuration of the page



The vertical configuration of the page



Page Selection



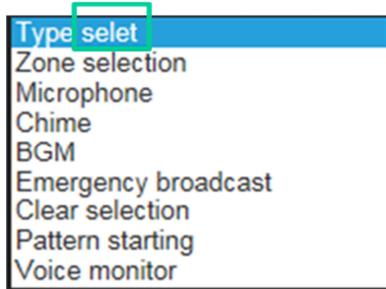
Page Introduction
 (1) Page select
 (2) Add
 (3) Delete
 (4) Page name

Setting Method

- 1) Select page to edit.
- 2) Click "Add" button to create a new page.
- 3) Page name can be modified after page selection.
 ※ The page name will be the page display name on MicConsole.
- 4) The page background can be selected by the "Background" button in page image corner. Use "Clear" button to remove the background image.
- 5) Click "Delete" button to delete any unwanted pages.



Button Selection



Setting Method

- 1) Choose the button selection after the page selection
- 2) Button can be set as "Zone selection" "Microphone" "Chime" "BGM" "Emergency broadcast" "Clear selection" "Pattern Starting" or "Voice Monitor"
- 3) The buttons are displayed in the fixed frame according to different functions.
- 4) The position of the button frame can be changed

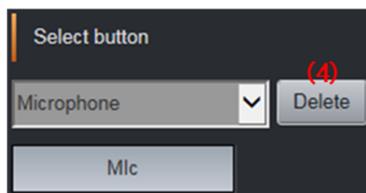
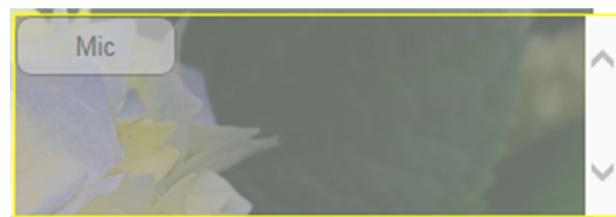
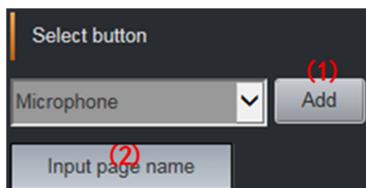
1. Zone selection
2. Talk Microphone
3. Chime
4. BGM

- 1). Playing device
- 2). Song number

5. Emergency broadcast
6. Clear selection
7. Pattern starting
8. Voice monitor

- 1). Audio input selection select the audio input (monitor)

- "Microphone", "chime", "emergency broadcast" and "clear selection", these four buttons can only set the name and shape of the button



Page Introduction

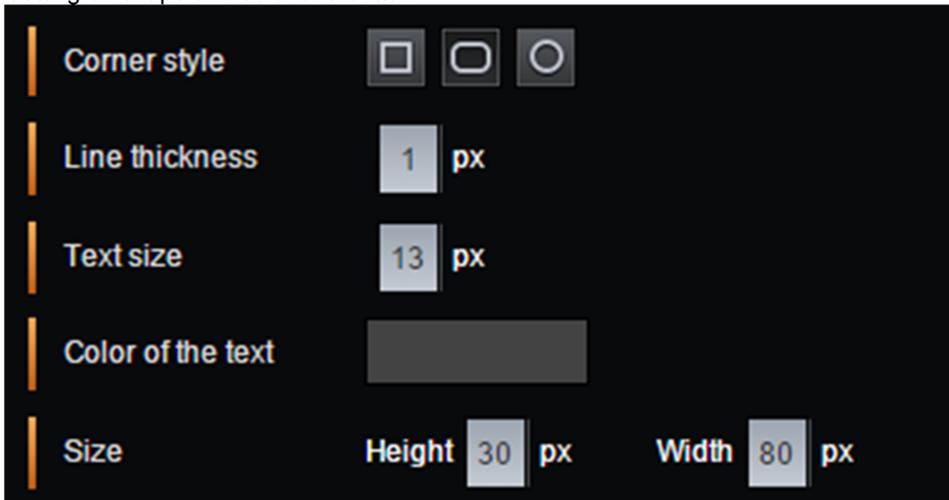
- (1) Add
- (2) Input page button name
- (3) The button been added in the frame
- (4) Delete

Setting Method

- 1) Click "Add" to create a new button and then input the button name.
- 2) The additional button will be showed in the frame.
- 3) "Delete" button to delete any button

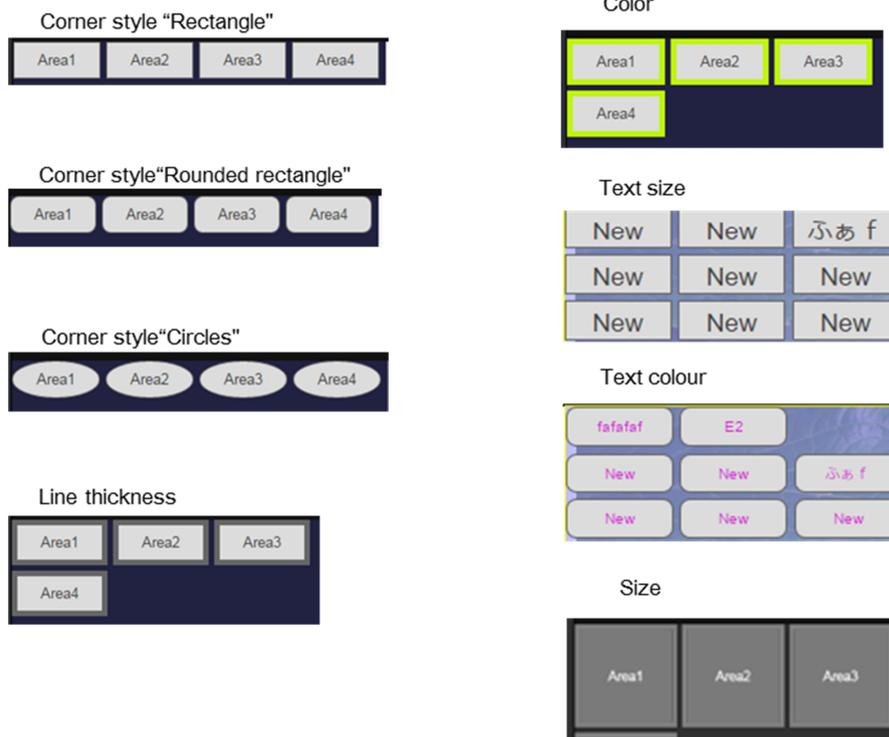
Button Characteristics

Setting of shape and color of a button



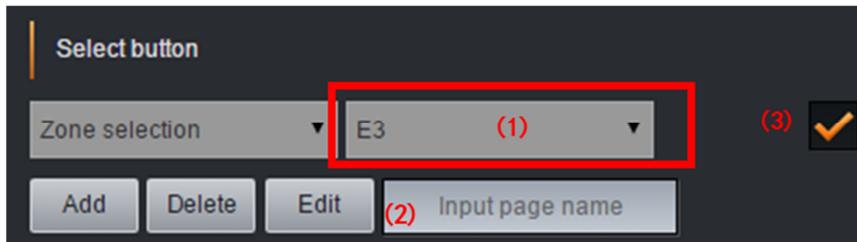
Setting Method

1. When the button is selected, you can set the shape and text color in the left panel.



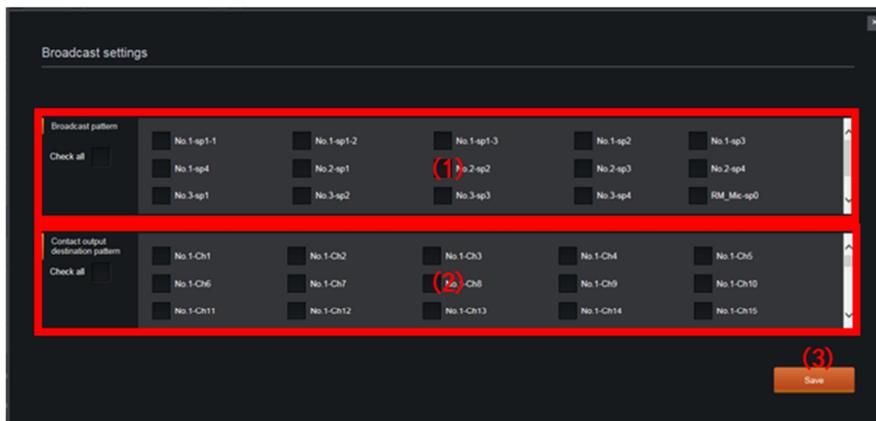
Zone Selection Button

For "Zone selection", "pattern starting", "BGM", "Voice monitor" these 4 buttons, other setting are also needed to set apart from button name and shape



Page Introduction

- (1) Select button
- (2) Input page name
- (3) Button undisplay selection



Page Introduction

- (1) Broadcast pattern
- (2) Contact output destination pattern
- (3) Save

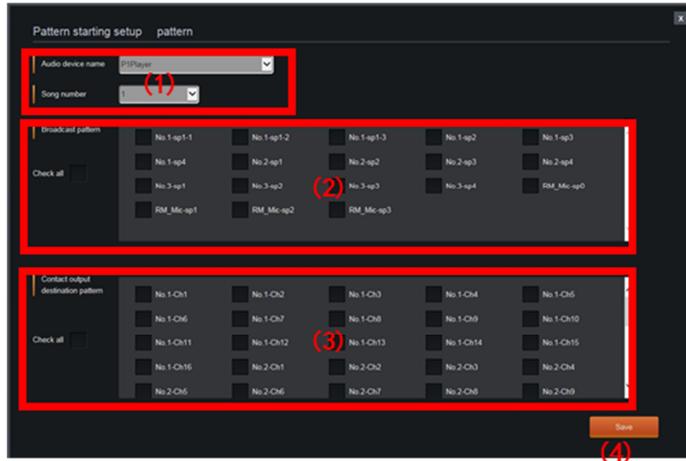
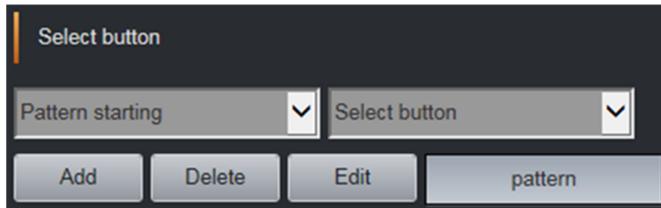
Settable Items

1. Broadcast pattern · · · Tick the displayed speaker line
2. Contact output destination pattern · · · Tick the displayed contact output

Setting Method

- 1) Enter the page of "Zone setting" from the sub item in "MicConsole Settings".
Tick the check box in zone setting page, then the button will be undisplayed and become a blank button.
- 2) Set the designated speaker line as contact output.
- 3) Click "Save" to return to the "MicConsole Settings" page after finish the setting.

Pattern Starting Button



Page Introduction

- (1) Pattern setting input
- (2) Broadcast pattern
- (3) Contact output destination pattern
- (4) Save

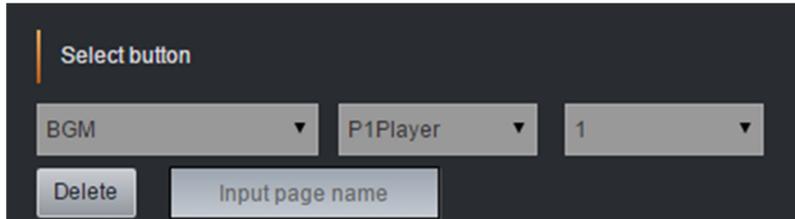
Settable Items

1. Audio device name
2. Song number
3. Broadcast pattern
4. Contact output destination pattern

Setting Method

- 1) Enter "pattern starting button" page from the sub item of "MicConsole Settings".
- 2) Select a audio device.
- 3) Set the various items.
- 4) Click "Save" to return to the "MicConsole Settings" page after finish the setting

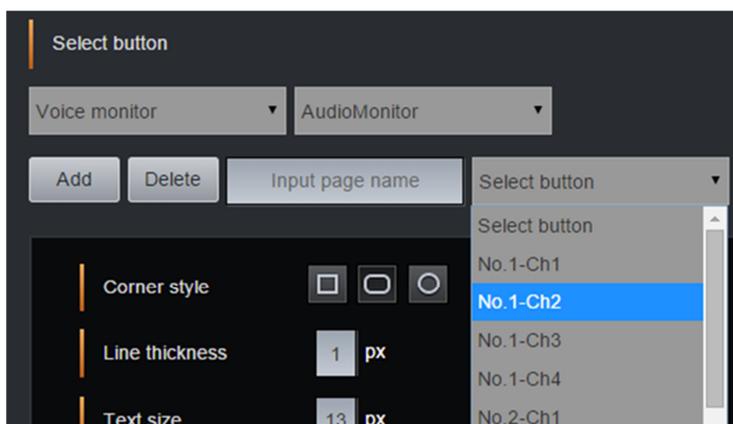
BGM Button



Setting Method

- 1) Select "BGM" in "button selection" page.
- 2) Select the audio device and song number

Voice Monitor Button



Setting Method

- 1) Select "voice monitor" in "button selection" page.
- 2) Select the audio input(monitor) from the list

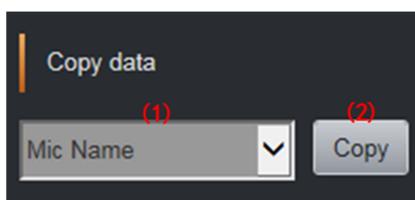
Frame Setting

Button display position (button can be moved by changing the position of each frame)



Copy Data Setting

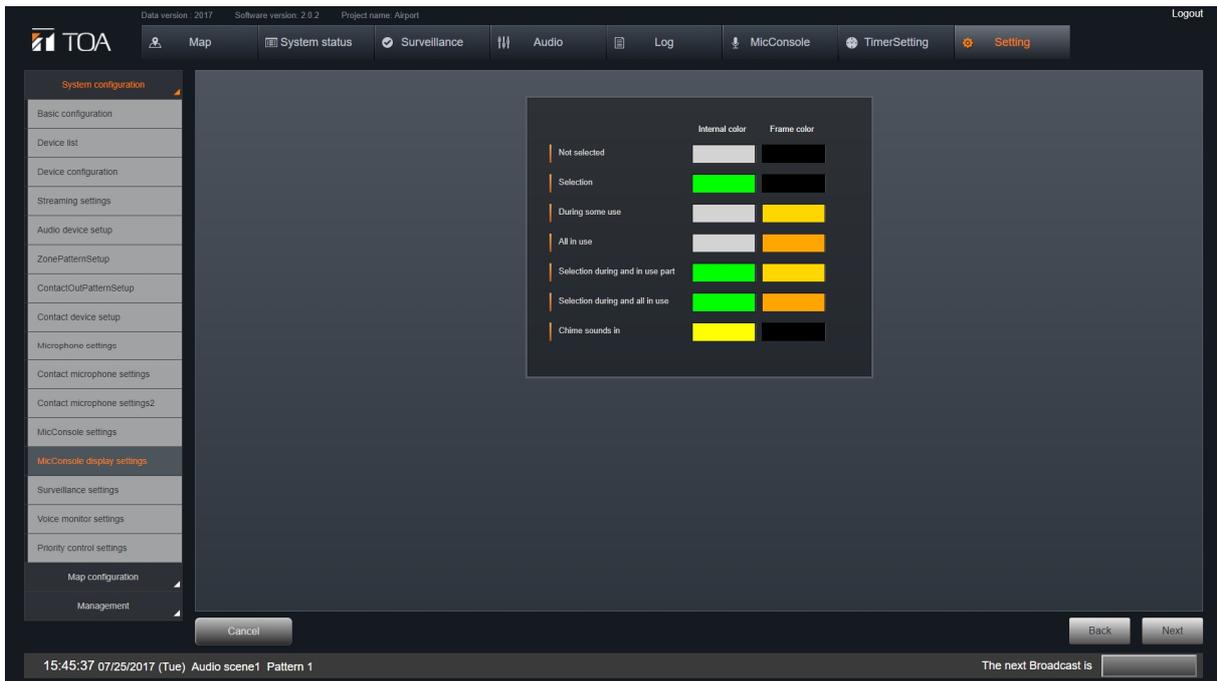
MicConsole needs to be set separately for each microphone. If a microphone setting is completed, the settings can be copied to other microphones.



- (1) Copy data selection
- (2) Copy

Microphone Console Display Settings

Designate the status color of each button on the microphone console screen.



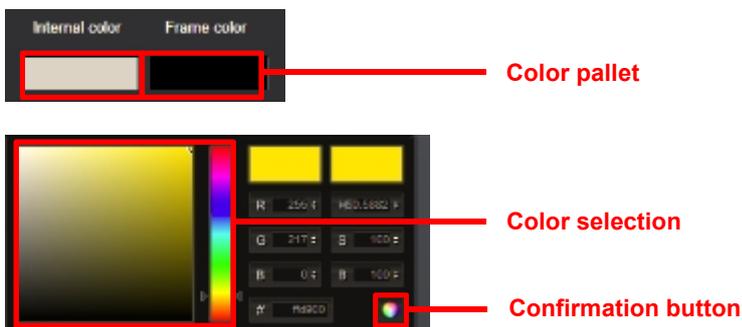
Setting Items

Set the button internal field and frame colors for the following items:

- Unselected
- Selected
- Part of designated broadcast zones already in use.
- All designated broadcast zones already in use.
- Currently selected and part of designated broadcast zone in use.
- Currently selected and all designated broadcast zones in use.
- Chime currently in progress.

Setting Method

Set each item's color using the color pallet.



Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
- Next: Advances to the 'Surveillance Settings' screen.
- Return: Reverts to the 'Microphone Console Settings' screen.

Surveillance Settings

Set the contact where the equipment is notified when the System Manager PC or amplifier fails. When set, the failure detection status is displayed on the Surveillance screen.

Item		Description
Server Error Setting box	Mains Power Voltage Failure	Set the IP-3010AF contact input that connects to the external equipment's contact output, which will close when a mains power failure is detected.
	UPS Failure	Set the IP-3010AF contact input that connects to the external equipment's contact output, which will close when a UPS failure is detected.
	RAID Failure	Set the IP-3010AF contact input that connects to the external equipment's contact output, which will close when a RAID failure is detected.
Amplifier Failure Setting box	Amplifier Failure	Set the IP-3010AF contact input that connects to the amplifier's contact output, which will close when an amplifier failure is detected. (Only audio output channels set to the 'Amplifier' classification on the 'Equipment Settings' screen can be set.)
	Protection	Set the IP-3010AF contact input that connects to the amplifier's contact output, which will close when the protection function is activated. (Only audio output channels set to the 'Amplifier' classification on the 'Equipment Settings' screen can be set.)
	Excessive Output	Set the IP-3010AF contact input that connects to the amplifier's contact output, which will close when excessive output is detected. (Only audio output channels set to the 'Amplifier' classification on the 'Equipment Settings' screen can be set.)
	Amplifier Internal Audio Path Failure	Set the IP-3010AF contact input that connects to the amplifier's contact output, which will close when a failure in the amplifier's audio path is detected. (Only audio output channels set to the 'Amplifier' classification on the 'Equipment Settings' screen can be set.)
	SP Short	Set the IP-3010AF contact input that connects to the external equipment's contact output, which will close when a short in the speaker line is detected. (Only audio output channels set to 'Speaker' on the 'Equipment Settings' screen can be set.)
	SP Open Circuit	Set the IP-3010AF contact input that connects to the external equipment's contact output, which will close when an open circuit in the speaker line is detected. (Only audio output channels set to 'Speaker' on the 'Equipment Settings' screen can be set.)
	SP Ground Fault]	Set the IP-3010AF contact input that connects to the external equipment's contact output terminal, which will close when a ground fault in the speaker line is detected. (Only audio output channels set to 'Speaker' on the 'Equipment Settings' screen can be set.)

Setting Method

Set the equipment contact that connects to the external equipment's contact output, which will close when any failure is detected.

- Perform contact settings on the Contact Auxiliary Dialog. When a contact is selected from the dialog, its contact ID is entered in the input field.

Operation Buttons

Cancel: Reverts to the Home screen without saving any setting.

Next: Advances to the 'Voice Monitor Settings' screen.

Return: Reverts to the 'Mic Console Display Settings' screen.

Voice Monitor Settings

Perform Audio Monitor settings. For further information on the Audio Monitor, refer to Chapter 3, 'Monitor Function.'

Item	Description
Audio monitor setting name	Enter an arbitrary name.
Contact input	Set the contact input that activates the 'Audio Monitor.'
Audio input	Set the audio input channel to monitor. (Select from among the audio input channels set to the 'Monitor' classification on the Equipment Settings screen.)
Speaker	Set the speakers to be used for monitoring. (Select from among the audio output channels set to the 'Monitor' classification on the Equipment Settings screen.)
Contact output for Selection In-Progress LED	Set the contact output that will close during Audio Monitor operation.

Setting Method

1. Select 'Audio Monitor' on the Setting List screen.
 - An 'Audio Monitor' is added to the list when the 'Add' button is clicked.
 - If the 'Delete' button is clicked, the selected Audio Monitor is deleted from the list.
2. Set Audio Monitor.

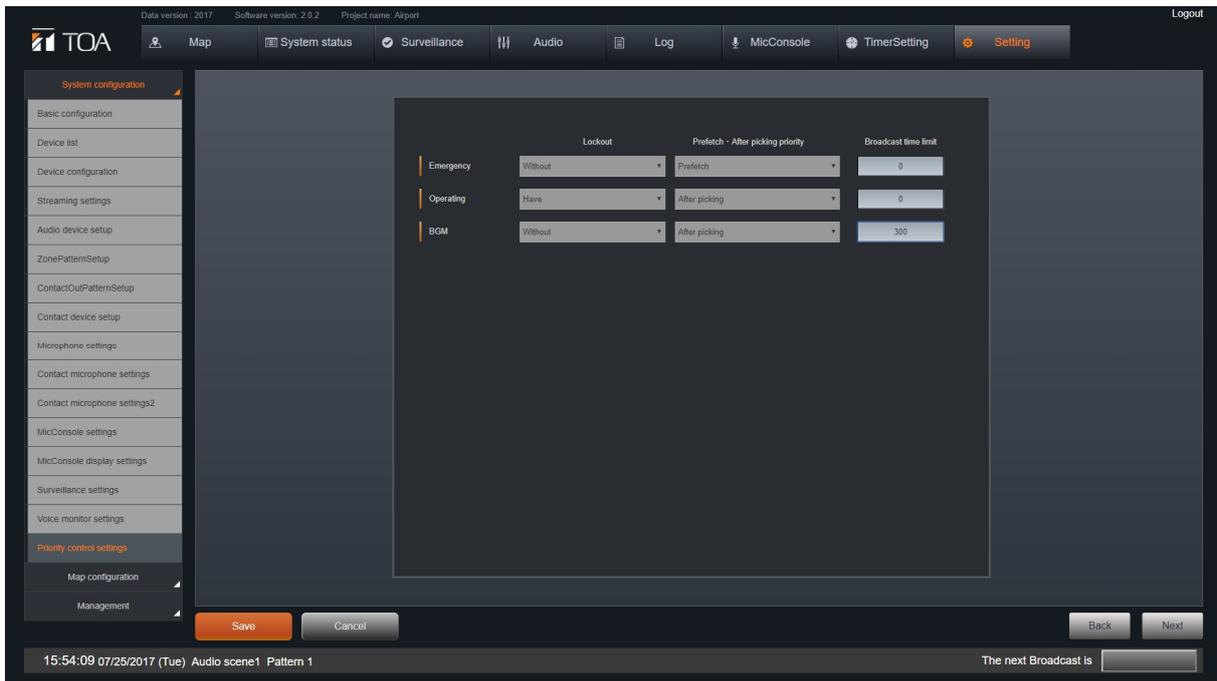
When 'Audio Monitor' is selected on the Settings List screen, settings can be performed on the right side screen.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Priority Control Settings' screen.
Return: Reverts to the 'Surveillance Settings' screen.

Priority Control Settings

Set priority operations and broadcast time limits for each broadcast classification.



Item	Description
Lockout*	Select either 'Enable' or 'Disable.'
FIFO/LIFO	Select either FIFO (first in first out) or LIFO (last in first out).
Broadcast Time Limit	Set the broadcast time limit. (Unit: sec. No time limit when set to '0.')

* If 'Enable' is selected, when a broadcast overlaps with another broadcast with a higher priority in a portion of its broadcasting destinations, the broadcast to all destinations is terminated. (In the case of BGM, a ducker function is operated.)

Setting Method

Type in a number or make a selection for each item.

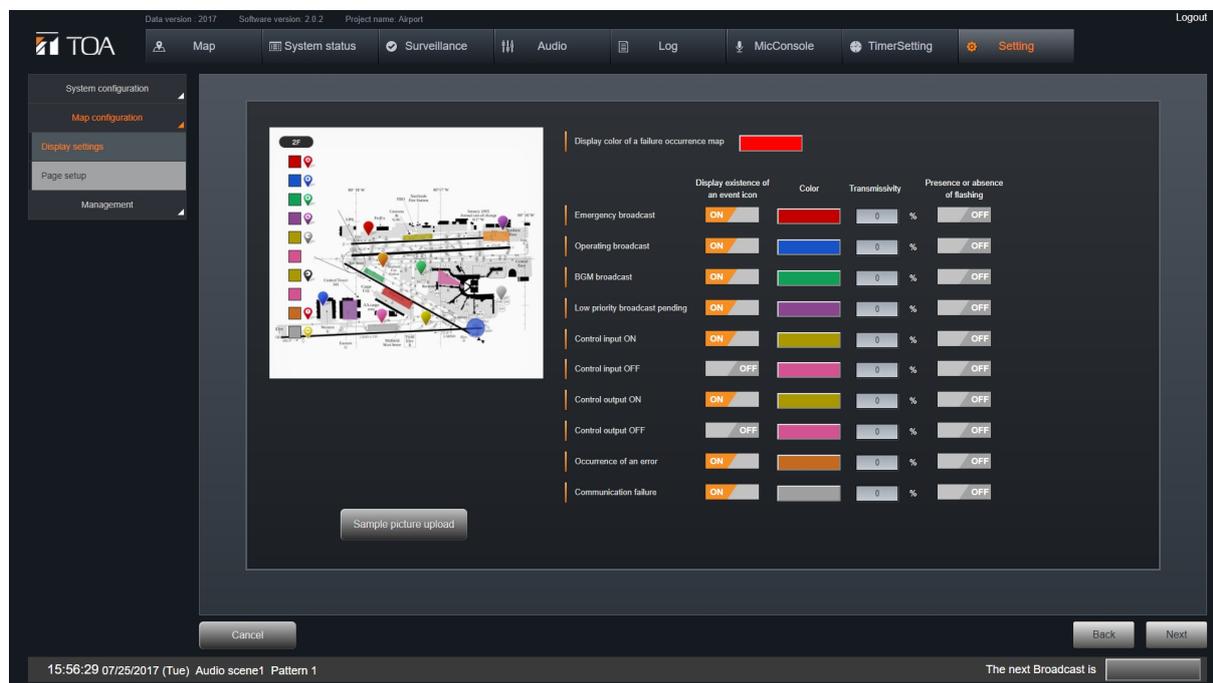
Operation Buttons

- Save: Saves all settings and reverts to the Home screen.
- Cancel: Reverts to the Home screen without saving any setting.
- Next: Advances to the 'Map configuration' screen.
- Return: Reverts to the 'Voice Monitor Settings' screen.

4. Map Configuration SETTINGS

Display Setting

Set the status display color of the Map screen.



Item	Description
Detected Error Map Display Color	Set the character color of the map page selection button for the map on which detected errors are displayed.
Event Icon	Set whether or not to display an event icon on the map when an event occurs. Select either 'ON' (displayed) or 'OFF' (not displayed).
Display Color	Set the color of objects displayed on the map when the related event occurs.
Object Transparency	Enter the transparency level of objects that appear on the map when the related event occurs.
Flashing	Set the display method for event icons that appear on the map when the event occurs. Select either ON (flashing display) or OFF (steadily-lit display).

Setting Method

1. Set the display method and display color for the contents of each event that can be set on the 'Set Map Page' screen.
The set contents are reflected in the display of the left-side sample screen.
2. Set the map display.
 - Click the 'Change Sample Image' button. By selecting an image in the file selection dialog, the background image of the left-side sample screen can be changed.
 - Selectable image file format: png, jpeg and gif.

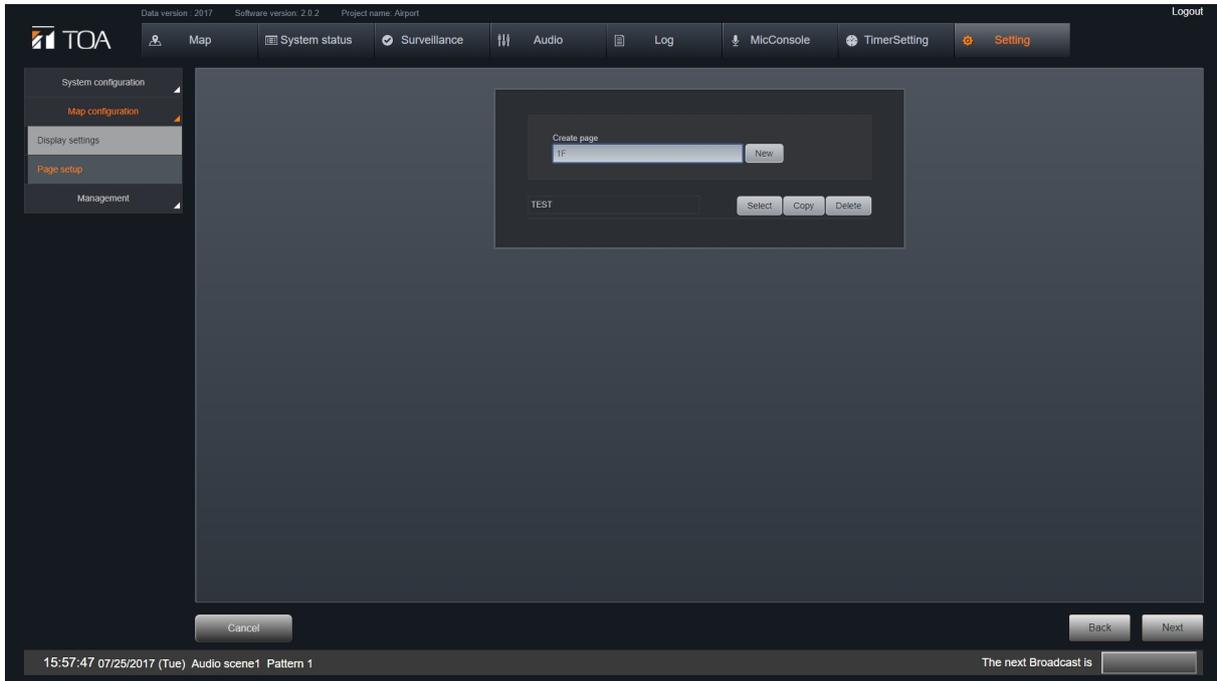
Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Page Setup' screen.
Return: Reverts to the 'Priority control settings' screen.

Page Setup

Set the operation of the Map screen.

When this screen is set, broadcast status can be displayed and broadcast operations can be controlled by event icons on the Map screen.

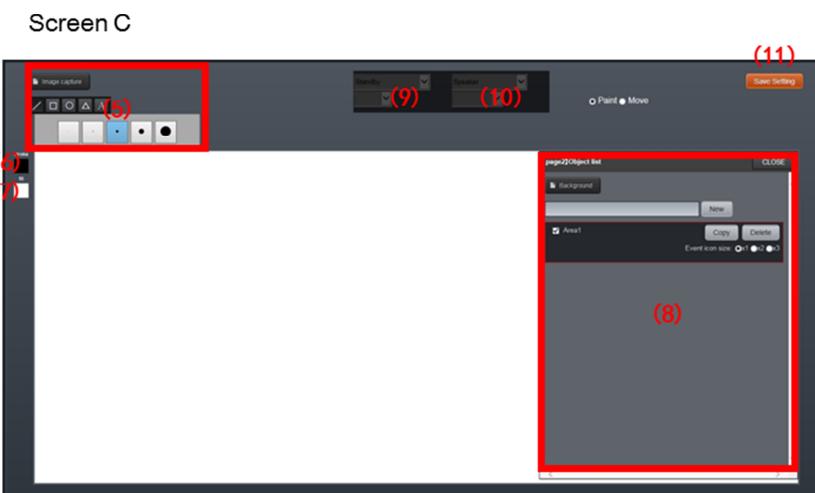
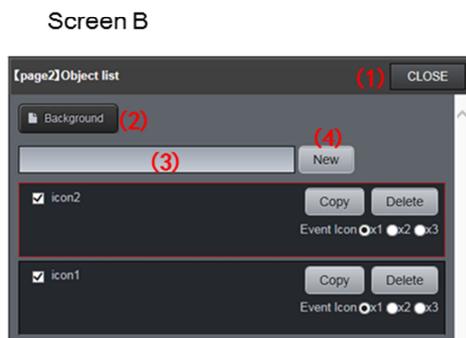


tem		Description
Page name input field	Page Name	Enter an arbitrary name
Object list	Object Name Input Field	Enter an arbitrary name.
	Object Display ON/OFF Checkbox	If checked, objects are not displayed.
	Event Icon	Select the size of the event icon.
	URL Input Field	Enter the URL link to be displayed on the web browser when selecting an object.
Text drawing tool	Text Input Field	Enter arbitrary characters.
	Character Type Selection	Select a text font.
	Italic	Check to use an Italic font
	Bold]	Check to use a boldface font.
Angle tool	Angle Tool	Used to set an object's display angle.

Map Page Setting Procedure Flow

1. Create a page.
2. Edit the page.
 - 2-1. Set the background image.
 - 2-2. Set the point size.
 - 2-3. Arrange objects.
 - 2-4. Set object operations.
3. Save the page.

Objects Creation (1)



Page Introduction

Screen A : Initial status of "Page creation" page

(1) Object list

Screen B : Initial status of "Object list"

(2) Background

(3) Object name input field

(4) New

Screen C : Page edition

(5) Drawing tools

(6) Stroke color setting (with palette display)

(7) Fill color setting (with palette display)

(8) Object list

(9) Objects action category

(10) Objects action setting

(11) Save

Setting Method

- 1) Initial status of "Page creation" page is displayed as screen A.
- 2) Click the "Object list" switch to open the object list (screen B).
- 3) Click "Background" button to select the background image.
- 4) Enter the object name and click "New" to create a object to the object list.
- 5) After adding objects, you can use functions such as drawing tools.

Objects Creation (2)



Page Introduction

- (1) Drawing tools
- (2) Stroke color setting (with palette display)
- (3) fill color setting (with palette display)
- (4) Object list
- (5) Objects action category
- (6) Objects action setting
- (7) Save

Settable Items

Objects action category Choose from the following four options

1. Broadcast status display Select speaker line
2. Device status display Select device
3. Control status display Select from control input and control output
4. No action

Objects action setting Choose from the following four options

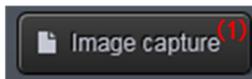
1. Microphone Select the microphone
2. Speaker line Select the speaker line
3. Control Select from control input and control output

Setting Method

- 1) Create the object by using the functions likes “image capture”, “line”, “geometric shapes” and “text”.
- 2) Set the objects action category and the corresponding settings.

Objects Creation (3)

Screen A: Image capture



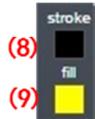
Screen B: Drawing tools (line or geometric shapes)



Screen C: Drawing Tools (Text)



Screen D : Color setting



Screen E: Rotation



Page Introduction

Screen A: Image capture

(1) Image capture

Screen B: Drawing tools (line or geometric shapes)

(2) Drawing tool (line thickness)

Screen C: Drawing Tools (Text)

(3) text input field

(4) text size

(5) text font

(6) italic

(7) bold

Screen D : Color setting

(8) Stroke color setting (with palette display)

(9) Fill color setting (with palette display)

Screen E: Rotation

(10) Rotation angle

(11) Apply

Setting Method

Image capture

- 1) Click “Image capture” button to select pictures from the local computer.
- 2) If you want image processing, process it by professional software before “Image capture”.
 - ※ The background image size of the page is 1024x450 pixels.

Line

- 1) Single click the line icon of the drawing tool.
- 2) Set the line thickness.
- 3) Set the line color in stroke color setting.
- 4) Single click and drag on the page to draw a line.
- 5) After straight line is drawn, you can rotate it with the angle tool.
- 6) If you want to move the line on the page, you need to switch to the Move mode.

Geometric shapes

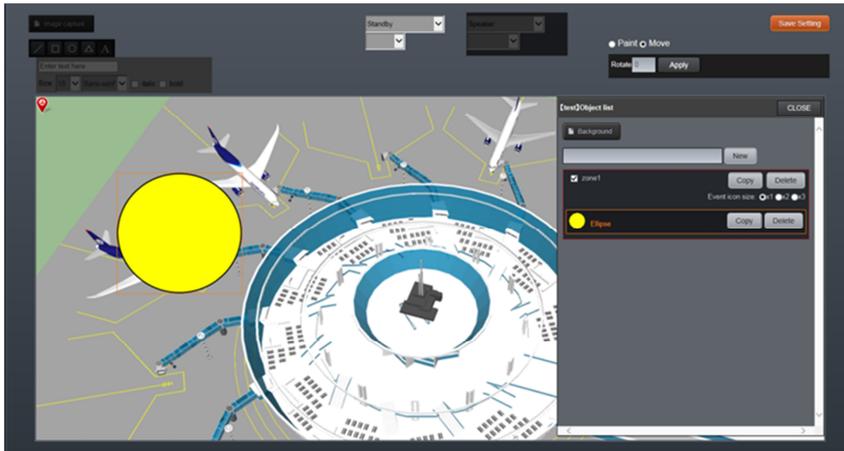
- 1) Single click the graphical icon (□ ○ △) of the drawing tool.
- 2) Select the line thickness.
- 3) Set the line color in stroke color setting and graphic color in fill color setting.
- 4) Single click and drag on the page to draw the graphics.
- 5) After the graphic is drawn, you can rotate it with the angle tool.
- 6) If you want to move the graphics on the page, you need to switch back to the Move mode.

Text

- 1) Single click the text icon of the drawing tool ([A]).
- 2) Enter the text in the text input field.
- 3) Select the text size.
- 4) Select the font.
- 5) can be set in italics and bold.
- 6) Use Stroke color setting to set the text color.
- 7) Single click on the page for the text configuration.
- 8) Text can be rotated with angle tool.
- 9) If you want to move the text on the page, you need to switch back to the Move mode.

Paint Mode and Move Mode

Move Mode



Method of Operation

- 1) Using the “Paint mode” for object creation and edition.
- 2) To change the position of the object on the page, Click “Paint / Move toggle switch” above the object list to switch to Move mode. Then, click the object and drag to move.
- 3) Unable to use drawing tools in “Move mode”.

Object Order

Screen A



Screen B

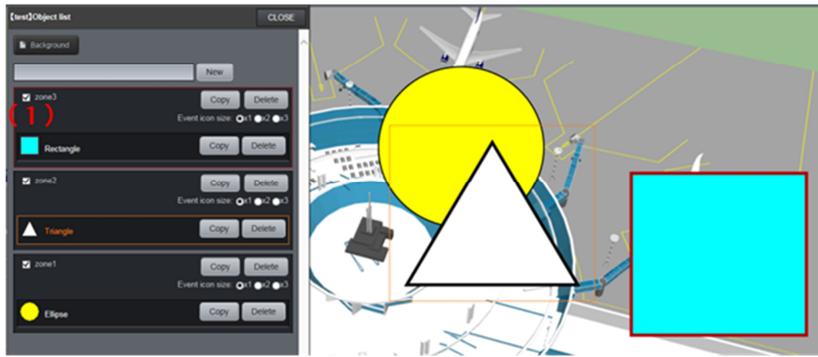


Method of Operation

- 1) Click and drag the graph on the object list to change the display order.
- 2) In screen A, the ○ graph is in the upper layer while the △ graph is in the lower layer of the object list .
- 3) In screen B, the △ graph is dragged upper than the ○ graph in the object.

Objects are Visible / Invisible

Screen A



Page Introduction

- (1) Switch for objects are visible · invisible Checkbox

Screen B



Setting Method

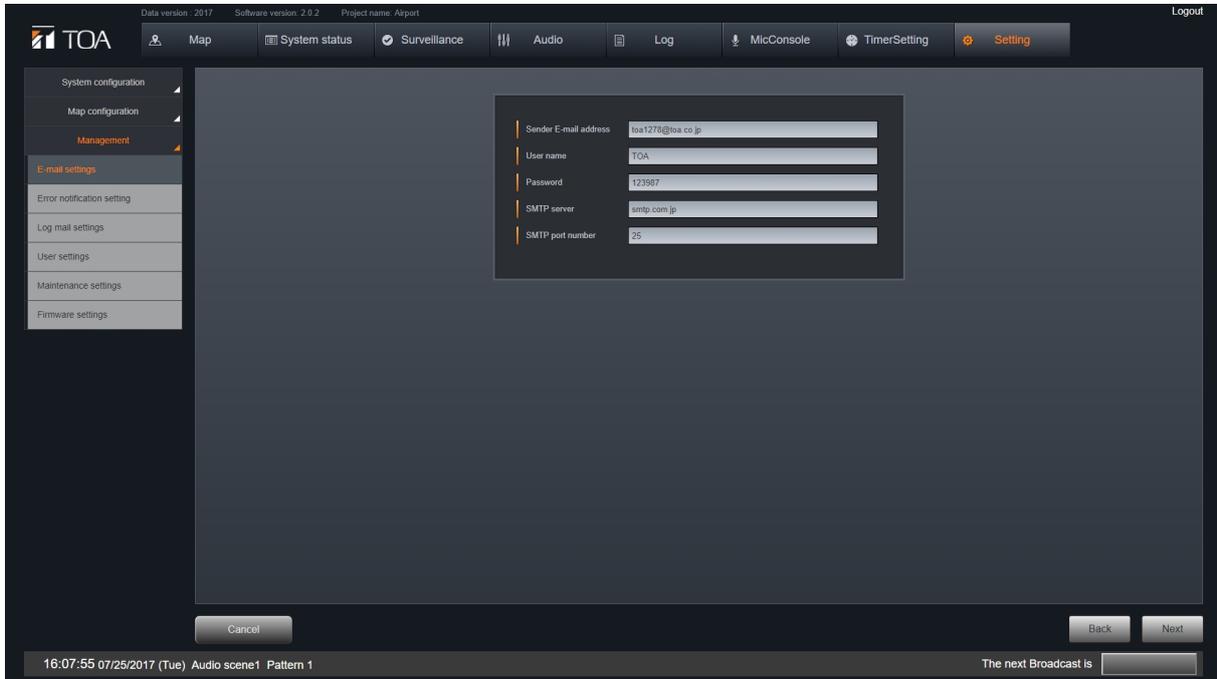
- 1) If check box on the left side of the object name are not ticked, the object are invisible on the screen.
- 2) In screen A, All check box on the left side of the object name are ticked. All graphics are visible on the screen.
- 3) In screen B, objects other than rectangles are not ticked. Δ and \circ graphics are invisible on the screen.

5. MANAGEMENT

Email Settings

Set up a mail server.

Settings must be performed on this screen when transmitting an error notification or system log by Email.



Item	Description
Transmission Source Email Address	Transmission Source Email Address
User Name	Enter a user name to access the mail server.
Password	Enter the password for access to the mail server.
SMTP Server Address	Enter the transmission destination's SMTP server address.
Port Number	Enter the transmission destination's server port number.

Setting Method

Enter the correct information for each item.

NOTE:

Emails cannot be transmitted if the information entered on this screen does not coincide with the settings for the connected mail server.

Operation Buttons

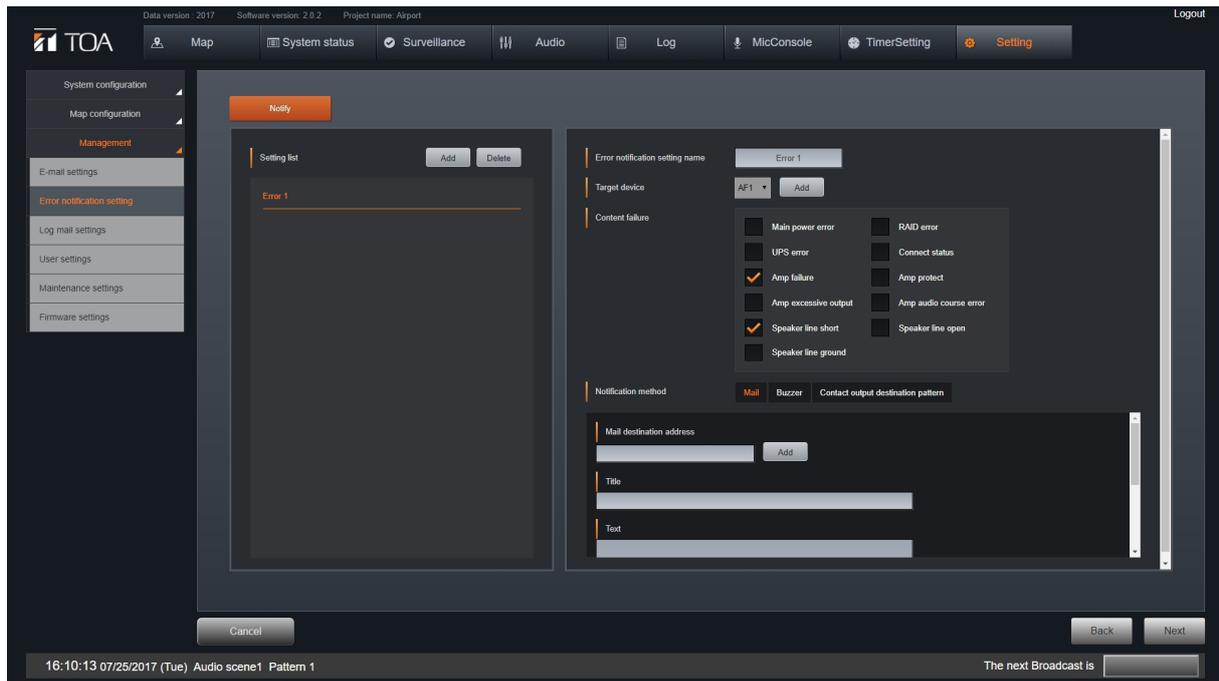
Cancel: Reverts to the Home screen without saving any setting.

Next: Advances to the 'Error Notification Settings' screen.

Return: Reverts to the 'Page setup' screen.

Error Notification Settings

Set the method and contents of notification to be sent when an error is detected.



Item		Description
Error Notification Settings Input Screen	Setting Name	Enter an arbitrary name
	Object Equipment	Select the equipment to which notifications are sent.
	Notification Item	Select the error notification item to be sent to the equipment selected in the 'Object equipment' settings.
	Notification Method	Select 'Email,' 'Buzzer' or 'Contact Output.'
Email Transmission Setting Input Screen	Email Destination Address	Enter the address to which email notifications will be sent when an error selected in the 'Notification Items' settings is detected.
	Title	Enter the title of the email
	Content	Enter the contents of the email
	Email Hours	Set the time range during which emails can be sent. Emails will not be sent when an error is detected outside the set time range. To make it possible to send emails at any time during a 24-hour period, set the start time to '00:00' and the end time to '23:59.'
Buzzer	Buzzer	Select ON or OFF. ON: When an error selected in the 'Notification Items' settings is detected, a buzzer sounds in the PC displaying the web viewer.
	Buzzer Hours	Set the time range during which the buzzer may sound. The buzzer will not sound when an error occurs outside the set time range. To make it possible to sound the buzzer at any time during a 24-hour period, set the start time to '00:00' and the end time to '23:59.'
Contact output	Contact Output	Set the component's contact output, which is closed when an error set in the 'Notification Item' settings is detected.

Setting Method

1. Select the item from the Settings List.
 - Items can be added to the list by clicking on the 'Add' button.
 - Selected item can be deleted from the list by clicking on the 'Delete' button.
2. Perform Error Notification settings.
 - Selecting an item on the Settings List allows settings to be performed on the right-side screen.
 - Email, buzzer and contact output are made available for the method of notification when an error occurs. Select the desired means of notification by clicking on it as required.
3. Enable or disable the notification function.
 - The function alternates between 'Enabled' and 'Disabled' with each click of the 'Enable Notification Function' button located at the top of the Settings List screen.
 - If set to 'Disabled,' error notifications are not transmitted regardless of the notification method setting.

Display of 'Disabled' on the 'Enable Notification Function' button

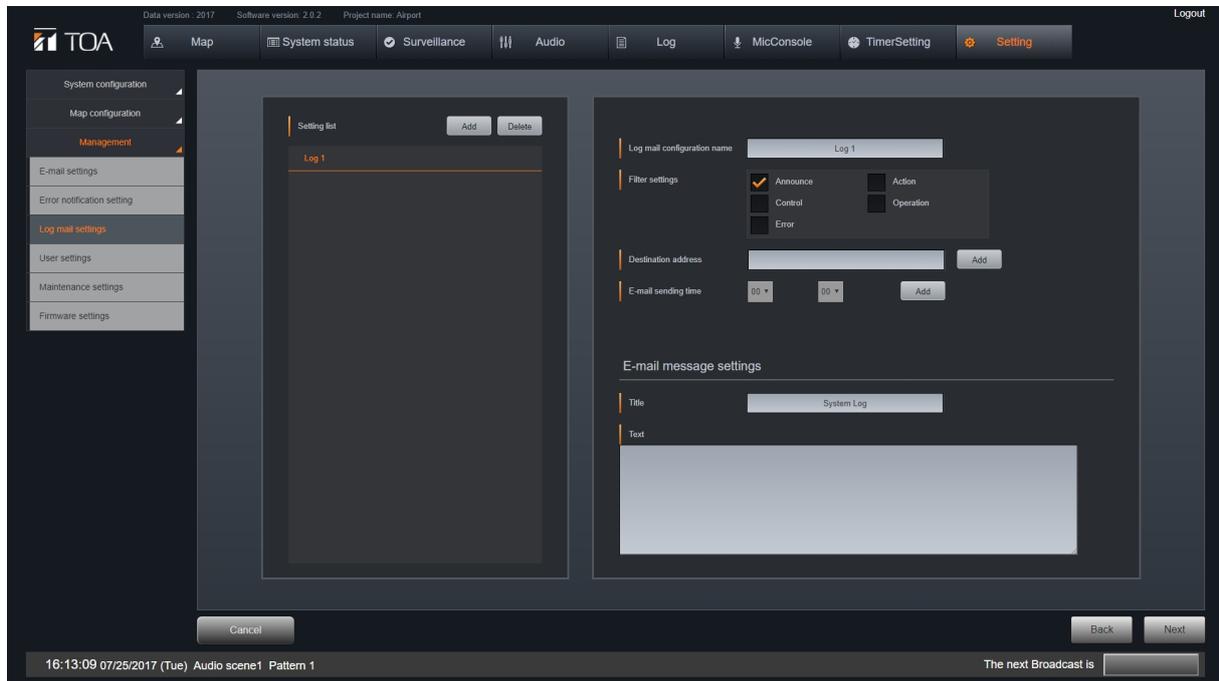
NOTE: When enabled, the button's background color becomes orange.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Log Mail Settings' screen.
Return: Reverts to the 'Email Settings' screen.

Log Email Settings

Set the function to transmit the contents of the system log by means of email. This function transmits emails with csv-formatted system logs attached to designated addressees at a specified time.



Item	Description
Setting Name	Enter an arbitrary name.
Filter Setting	Select the classification of the log to be notified.
Email Destination Address	Enter the email destination address.
Email Transmission Time	Set the transmission time.
Title	Enter the title of the email.
Content	Enter the contents of the email.

Setting Method

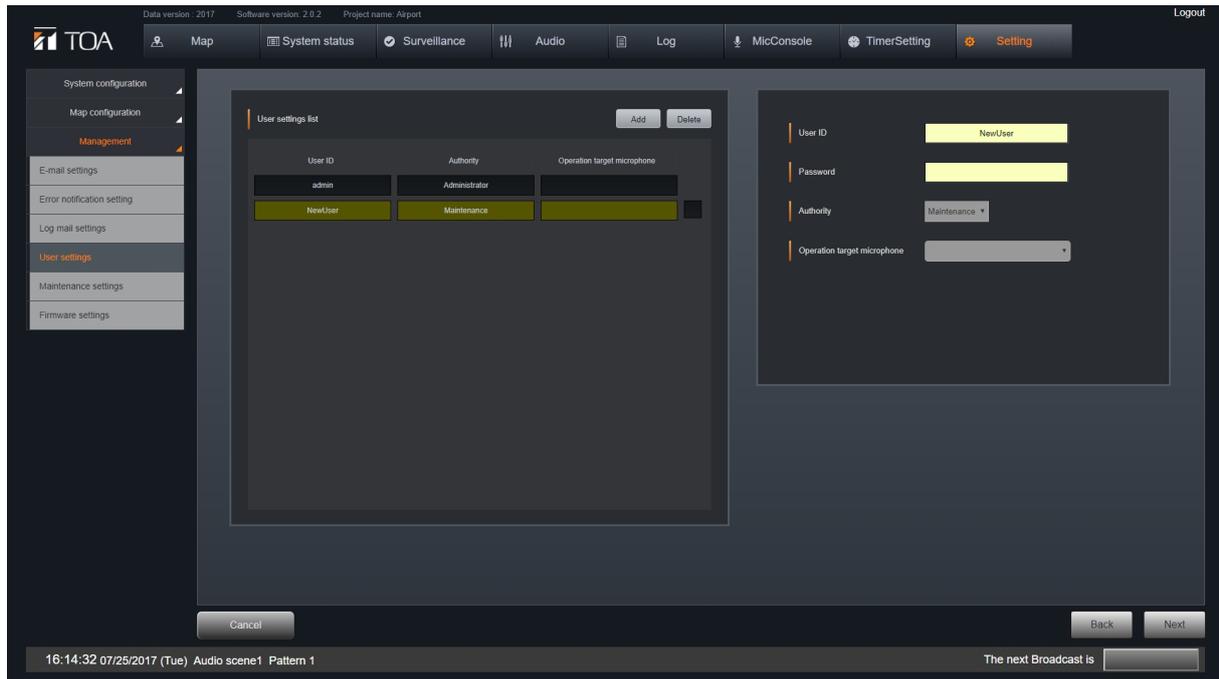
- Select the item from the Settings List.
 - Items can be added to the list by clicking on the 'Add' button.
 - Selected item can be deleted from the list by clicking on the 'Delete' button.
- Set the log email.
By selecting an item from the Settings List, settings can be performed on the right-side screen.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'User Settings' screen.
Return: Reverts to the 'Error Notification Settings' screen.

User Settings

Set information on users who can log into the system.



Item	Description
User ID	Enter the ID for logging into the system.
Password	Enter the password for logging into the system.
Authority	Select the authority of the user (Administrator, 'Maintenance' or 'User').
Operation Target Microphone	Select the microphone to be operated on the Microphone Console screen. (Select from among the 'Web' microphones set on the 'Microphone Settings' screen.)

Setting Method

1. Select an item from the User Settings list.
 - User settings can be added to the list by clicking on the 'Add' button.
 - Selected user settings can be deleted from the list by clicking on the 'Delete' button. (Note that user settings for the user name 'Admin' cannot be deleted.)
2. Set user information.
When an item is selected on the Settings List, settings can be performed on the right-side screen.

NOTE:

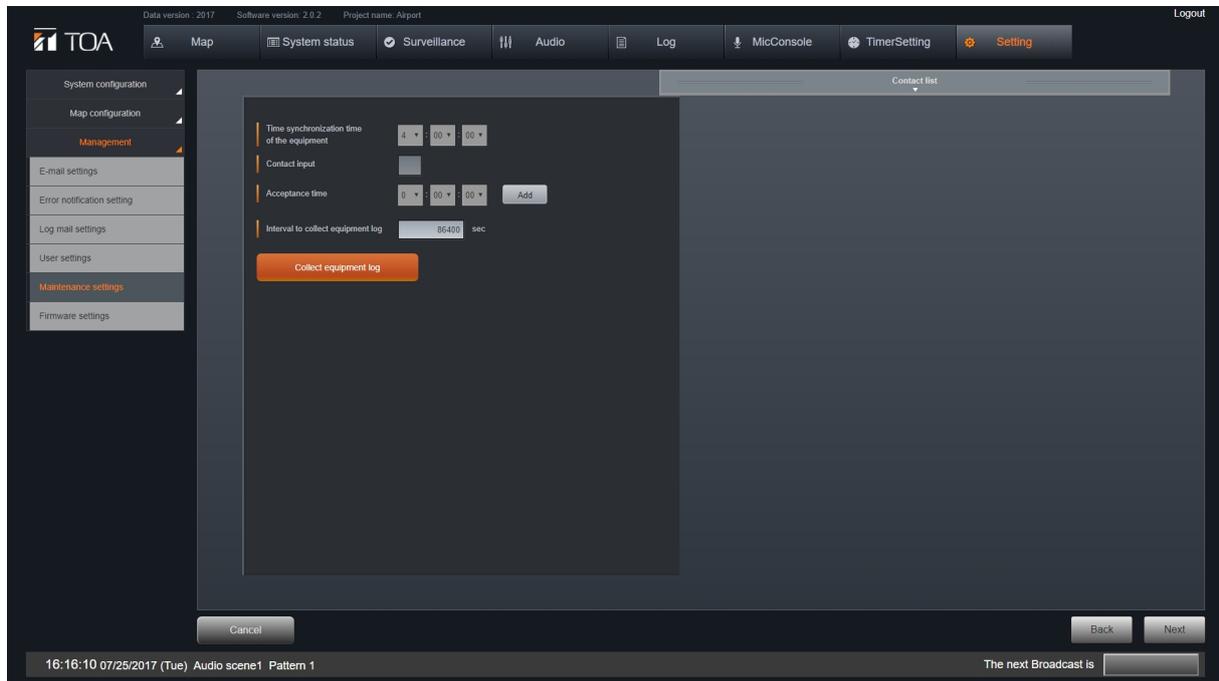
Do not set the same 'Operation Target Microphone' for multiple users.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
Next: Advances to the 'Maintenance Settings' screen.
Return: Reverts to the 'Log Email Settings' screen.

Maintenance Settings

Synchronize the time among connected components and set log collection intervals for the system.



Item	Description
Clock Synchronization Time	Set the time to synchronize clocks at among the System Manager PC, IP-3010AF, IP-3001AF and IP-300RM.
Contact Input	Set the component's contact input to be connected to the master clock's contact output for clock synchronization.
Receiving Time	Set the time to correct the System Manager PC's clock. If the contact set in the 'Contact Input' settings is closed within ± 15 seconds of the correction time, the clock will be corrected.

Setting Method

- Set each setting item.
Receiving times can be added by clicking the 'Add' button.
- When acquiring an equipment log, click the 'Acquire Equipment Log' button.
When clicked, the equipment logs for the system's IP-3010AF, IP-3001AF and IP-300RM are instantly acquired.

Equipment log storage location and file format

— Acquired equipment logs are stored in the following folder of the System Manager PC in order of date.

Folder C:\ProgramData\TOA\IP-3000SM\EquipmentLog
 Filename Equipment name yyyyymmdd.log

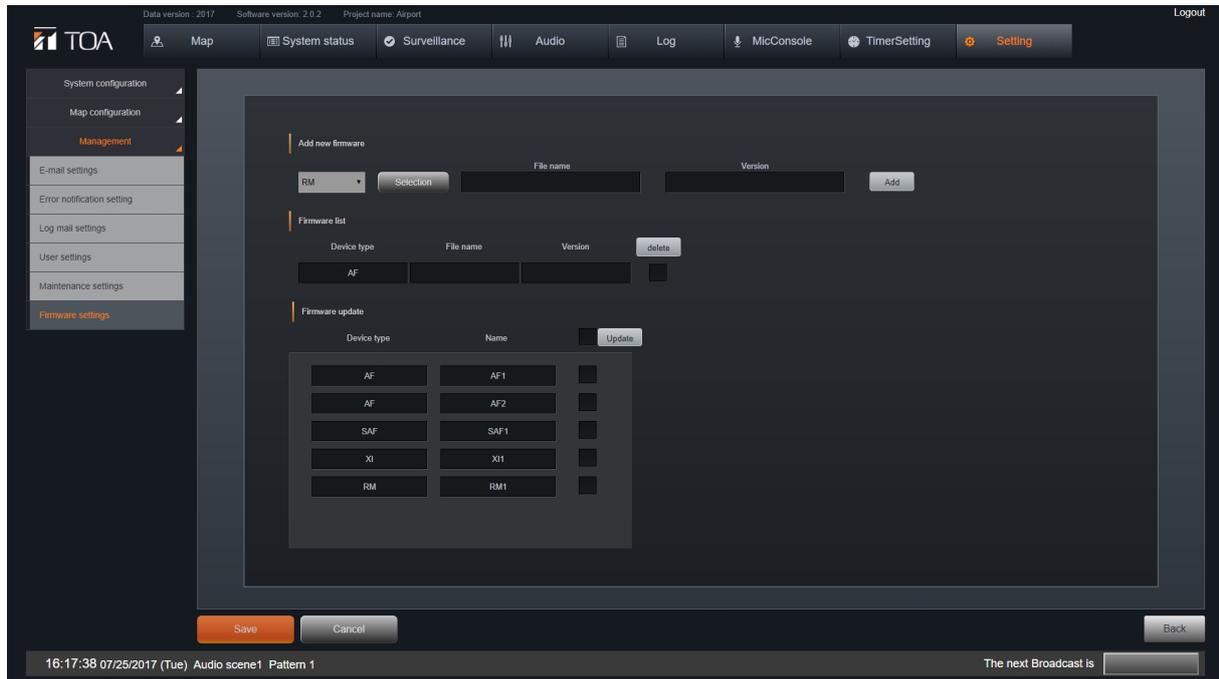
— Stored equipment logs can be opened using Memopad or another text editor.

Operation Buttons

- Cancel: Reverts to the Home screen without saving any setting.
 Next: Advances to the 'Firmware Settings' screen.
 Return: Reverts to the 'User Settings' screen.

Firmware Settings

Update the equipment's firmware.



Item	Description
Filename	Select the firmware to be updated.
Version	Enter the current firmware version.

Setting Method

1. Press the 'Select' button and select the equipment's firmware (extension .bin) on the file selection screen.
The selected filename is displayed in the Filename field.
2. Enter arbitrary characters in the Version field.
3. Click the 'Add' button to register the firmware.
The contents set in Items 1) and 2) above are displayed in the Filename and Version fields of the 'Firmware List' line.
4. On the Equipment List screen, check the equipment for which the firmware is to be updated, and click the 'Update' button.
 - If the update is successful, the 'Firmware Update Successful' dialog is displayed.
 - If the update fails, the 'Firmware Update Failure' dialog appears and the name of the equipment is displayed in the dialog.
 - If the update fails, confirm the communication status between the System Manager PC and the equipment, then perform update operations again.

Operation Buttons

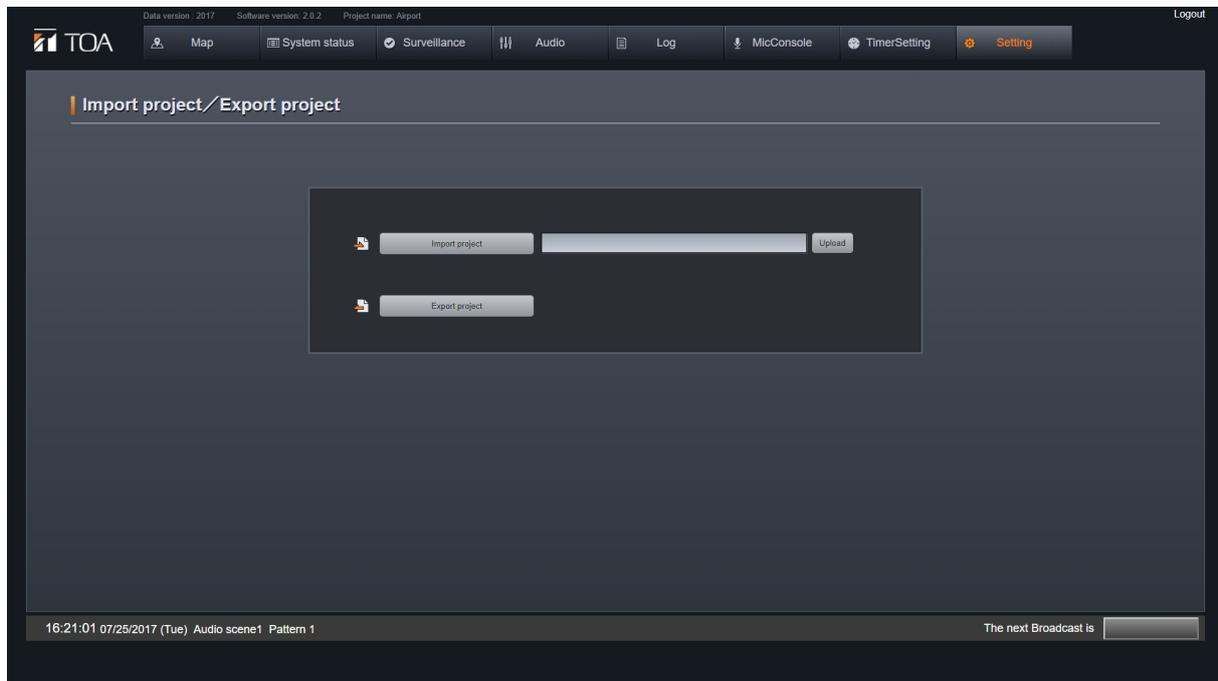
- Save: Saves all settings and reverts to the Home screen.
Cancel: Reverts to the Home screen without saving any setting.
Return: Reverts to the 'Maintenance Settings' screen.

6. IMPORTING AND EXPORTING SETTINGS

Here, perform operations to import and export the setting files.

Settings Import/Export Screen Display

On the Web viewer, click 'Home Screen' → 'System Settings' → 'Setting Import/Export' or 'Header Menu' → 'System Settings' → 'Import/Export.'



Importing and Exporting All System Settings

Import

- When the 'Import' button is clicked, a request appears for selection of the file in the PC. The extension of the setting file is .npa.
- When the 'Update' button is clicked, the System Settings screen in which the imported setting contents are reflected is displayed.
- When the 'Save' button on the system settings screen is clicked, the system is restarted according to the imported setting contents.

NOTE:

In the event that settings are imported, it will be necessary to reset the 'Operation Target Microphone' designated for each user on the user settings screen.

Export

Click the 'Export' button. As designation of the storage destination for the settings files will be requested, designate the destination and save the files.