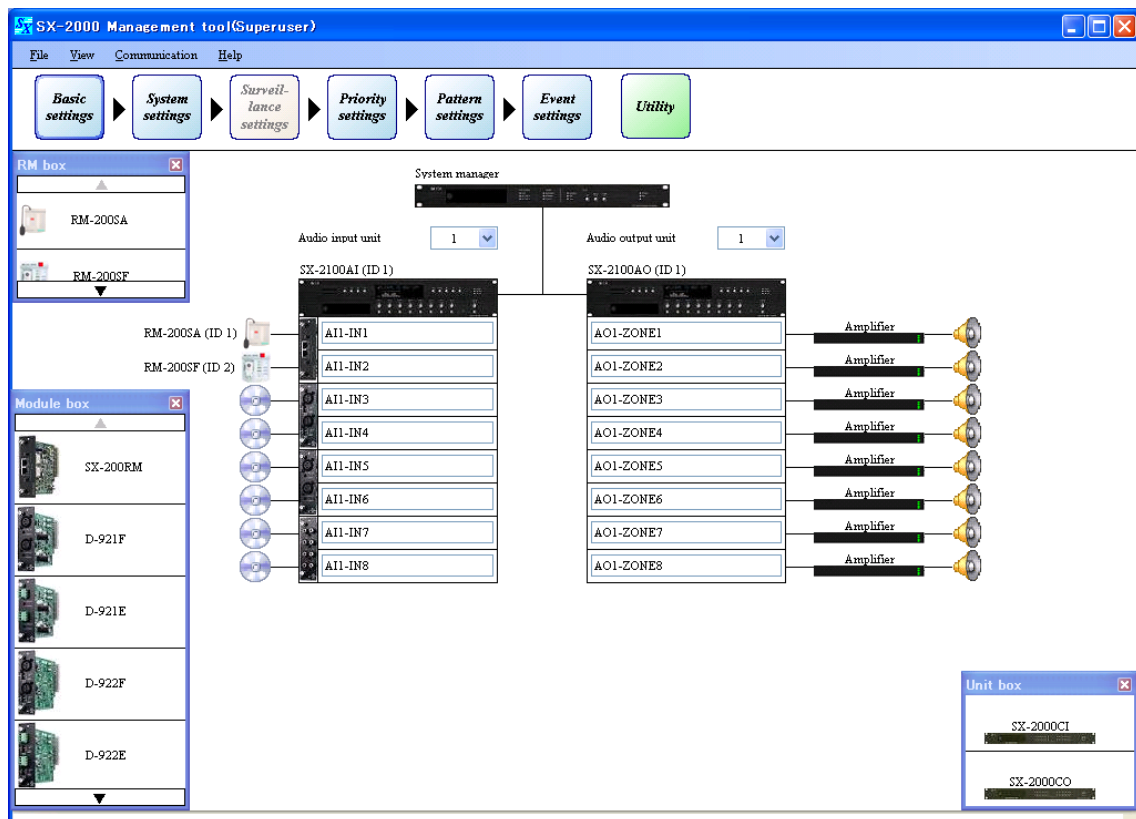




# SETTING SOFTWARE INSTRUCTIONS

## MATRIX SYSTEM

## SX-2000 SERIES



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

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# 1. SX-2000 SETTING SOFTWARE OUTLINE

The SX-2000 Setting Software allows the settings data needed for operation of SX-2000 Series Matrix Systems to be created using a personal computer.

These settings are saved in the form of a file with the extension ".smd."

This file can be saved to a CompactFlash (CF) card that may be read by inserting it into the SX-2000SM System Manager.

In addition, setting data can be sent and received online, or system operation status or histories confirmed through establishment of communications between the SX-2000SM System Manager and the PC.

## 2. EXPLANATIONS OF TERMS & FUNCTIONS

### 2.1. Pattern

A "pattern" is a grouped unit made by combining setting statuses of several setting items.

For example, various broadcast patterns are made by combining the selected input sound sources and broadcast zones into groups, and control output patterns are made by grouping the selected control outputs.

Set various patterns can be used as the setting contents when creating other types of patterns or when allocating the functions in the Event settings.

### 2.2. Event

An "event" refers to the set operation to be performed by feeding signals to the control input terminals or pressing the function key.

Allocatable functions differ depending on the terminals or keys to be used.

### 2.3. General-Purpose Broadcasts

General-purpose broadcasts include announcements made by Remote Microphones, time-controlled chimes, and spot commercials. To make general-purpose broadcasts, set general-purpose broadcast patterns (comprised of various combinations of input channels, priority levels, broadcast zones, etc.), then activate these patterns by the following means.

- Control inputs of the SX-2000SM, SX-2100AI, SX-2000AO, SX-2100AO, or SX-2000CI
- Function keys or channel keys on the SX-2000AI, SX-2100AI, SX-2000AO, or SX-2100AO
- Keys on the RM-200SF, RM-200S, RM-200SA, or RM-210

The broadcasts activated by control inputs are made only while the control signal is ON after audio and control signals from input devices (such as microphones and audio file players) enter the SX-2000 system.

To make general-purpose pattern broadcasts, follow the procedures below to perform each setting using the SX-2000 Setting Software.

**Set the output zones to which general-purpose pattern broadcast is made.**

When using the output zone pattern, set this in the "Output zone pattern settings."

**Output zone pattern settings**

Number: 1

Name: Zone pattern 1

	Zone1	Zone2	Zone3
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3

When setting the individual output zones, perform this setting in the "General broadcast pattern settings."

**Set the general-purpose broadcast patterns.**

Perform this in the "General broadcast pattern settings."

**General broadcast pattern settings**

Number: 1

Name: General pattern 1

Input: A11-IN1 [General]

Output:  Individual  Pattern

001: Zone pattern 1

	Zone1	Zone2	Zone3
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3

**Set the control output to be interlocked with the control input or key operation. \***

Perform this in the "Control output pattern settings."

\* Perform this setting as needed.

**Control output pattern settings**

Number: 1

Name: Control output pattern 1

SM	SM-COUT1	SM-COUT2	SM-COUT3
A11	A11-COUT1	A11-COUT2	A11-COUT3
	A11-COUT9	A11-COUT10	A11-COUT11

**Assign both the general-purpose broadcast pattern and control output pattern to the control input or key of the device, or the key on the remote microphone.**

Perform this in the "Event settings."

SYS1	SYSKEY1	General broadcast	General pattern 1	Control output pattern 1
------	---------	-------------------	-------------------	--------------------------

**[General-purpose broadcast Pattern Setting Example]**

In the example below, the table shows a pattern comprised of several general-purpose broadcast sound sources and broadcast zones.

An output zone pattern is the one into which multiple broadcast zones are grouped, so broadcast can be made to multiple zones simultaneously by activating only one pattern.

**• Output zone pattern setting**

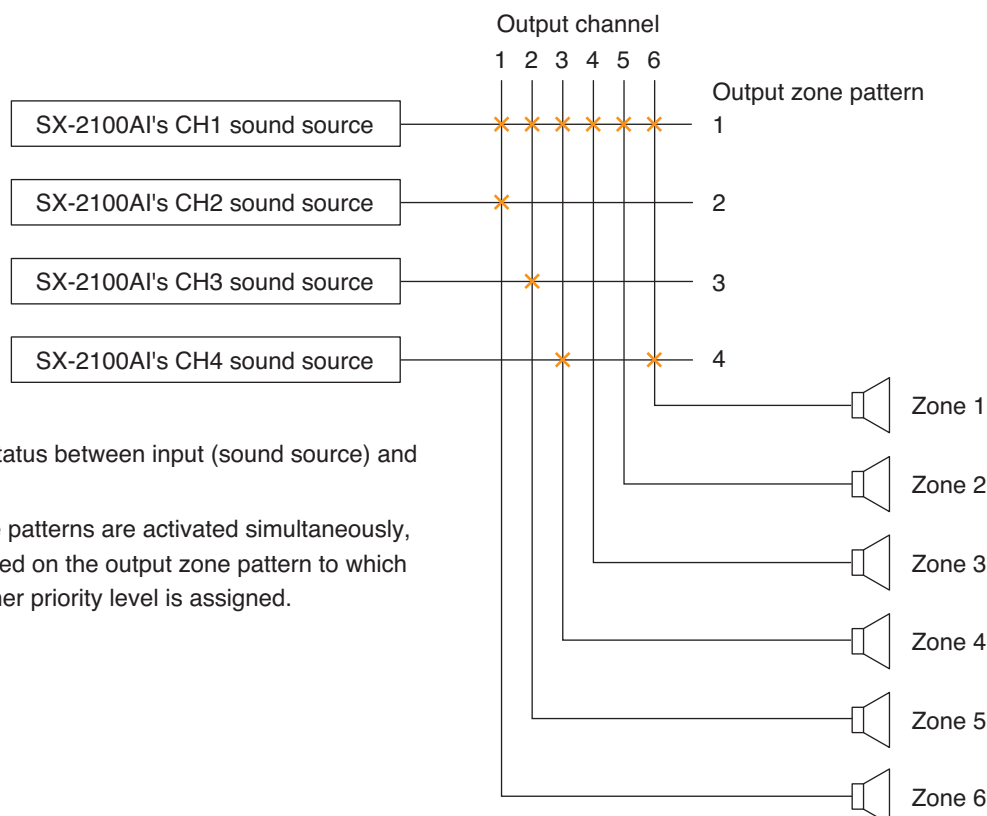
		Zones SX-2000AO's output channels					
		1	2	3	4	5	6
Output zone pattern (No.)	1	✓	✓	✓	✓	✓	✓
	2	✓					
	3		✓				
	4			✓			✓

The input channels of the SX-2100AI (Audio Input Unit) are designated as sound sources for general-purpose broadcasts or BGM, while the output channels (individual) or output zone patterns of the SX-2000AO (Audio Output Unit) are designated as zones.

**• General-purpose broadcast pattern setting**

		Zones Output Zone Pattern			
		1	2	3	4
Input Sources SX-2100AI's Input Channels (CH)	CH1	✓			
	CH2		✓		
	CH3			✓	
	CH4				✓

Broadcasts are made as follows when the above general-purpose broadcast pattern is used.



✕ shows the connection status between input (sound source) and output channel (zone).

When multiple output zone patterns are activated simultaneously, the broadcast is made based on the output zone pattern to which the sound source with higher priority level is assigned.

## 2.4. BGM Broadcasts

These broadcasts are generated by inputting audio signals originating only from BGM player devices into the SX-2000 system, and are usually sent at relatively low volumes. BGM broadcasting is conducted by first setting BGM patterns (comprised of various combinations of input channels, broadcast zones, etc.), then activating these patterns. It is possible to perform settings so that multiple BGM sources are output to multiple zones using a single BGM pattern. BGM patterns can be activated using the function keys on the front panel of the SX-2000AI, SX-2100AI, SX-2000AO, or SX-2100AO, the keys on the RM-200SF, RM-200S, RM-200SA, or RM-210, or the control input (pulse input) on the SX-2000SM, SX-2100AI, SX-2000AO, SX-2100AO, or SX-2000CI.

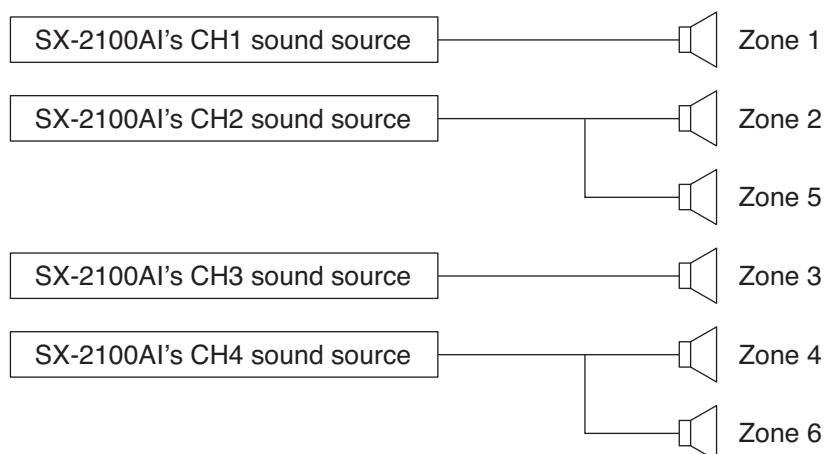
To make BGM pattern broadcast, perform each setting using the SX-2000 Setting Software. The setting procedures are the same as those of general-purpose pattern broadcast. However, there is no need to perform output zone patterns.

### [BGM Pattern Setting Example]

In the example below, the table shows a pattern comprised of several BGM sound sources and broadcast zones. The input channels of the SX-2100AI (Audio Input Unit) are designated as BGM input sources, while the output channels of the SX-2000AO (Audio Output Unit) are designated as the zones.

		Zones SX-2000AO's Output Channels					
		1	2	3	4	5	6
Input Sources SX-2100AI's Input Channels (CH)	CH1	✓					
	CH2		✓			✓	
	CH3			✓			
	CH4				✓		✓

Broadcasts are made as follows if the pattern shown in the table is used:





## 2.5. Emergency Broadcast

Emergency broadcast is conducted by first setting the combinations of the Emergency Sequences, Output zones (individual or pattern), and Control Output patterns as Emergency Broadcast Patterns, then activating these patterns by pressing the key on the remote microphone or via the control input of the system equipment. A maximum of 128 patterns can be set for the Emergency Broadcast Patterns.

A combination of the EV message (sound source) and its broadcast duration is set as a single phase for the Emergency Sequences, each of which can contain up to 3 levels of phases. A maximum of 4 Emergency Sequences can be set.

Emergency Sequence	Phase 1	Phase 2	Phase 3
	EV message + broadcast duration	EV message + broadcast duration	EV message + broadcast duration

### Note

An EV message is a short form of Electronic Voice Message. These messages are recorded as audio files.

The separately created EV messages are registered using the Setting Software, and each message is set to one of 3 types: Alert, Evacuation, and Reset depending on the contents.

The Alert and Evacuation messages are used in emergency situation, while the Reset message is used to notify that the emergency situation is over.

Sixteen kinds of EV messages can be recorded on the SX-2000SM's CF card.

Output zone pattern is the one into which multiple broadcast zones are grouped, so broadcast can be made to multiple zones simultaneously by activating only one pattern.

Output zone pattern	Multiple zones
---------------------	----------------

Similarly, control output pattern is the one into which multiple control outputs are grouped. This control output pattern can be used, for example, to activate multiple control outputs in synchronization with the emergency broadcast.

Control output pattern	Multiple control outputs
------------------------	--------------------------

To use the emergency broadcasting function, follow the procedures below to perform each setting using the SX-2000 Setting Software.

### Set the emergency broadcasting function to "Used."

Perform this in the "Basic settings."

Emergency broadcasting function

Used

### Register the EV messages.

Perform this in the "System settings (System manager)."

	Sound source file			Name	Type	Playback method
1	Load	Play	Delete	Alert Message1	Not used	
2	Load				Not used	
3	Load				Alert	
4	Load				Evacuation	
					Reset (All clear)	
					General	

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**Set the output zones to make emergency broadcast.**

Perform this in the "Output zone pattern settings."

**Output zone pattern settings**

Number: 1  
Name: Zone pattern 1

	Zone1	Zone2	Zone3
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3

**Set the control output to be activated at the time of emergency broadcast\*.**

Perform this in the "Control output pattern settings."

\* Perform this setting as needed.

**Control output pattern settings**

Number: 1  
Name: Control output pattern 1

SM	SM-COUT1	SM-COUT2	SM-COUT3
All	All-COUT1	All-COUT2	All-COUT3
	All-COUT9	All-COUT10	All-COUT11

**Set the Emergency Sequences.**

Perform this in the "Emergency sequence settings."

**Emergency sequence settings**

Number: 1  
Name: Emergency sequence 1

Phase 1

Message: sign0001 [Alert]  
Duration(min): 5

**Set the Emergency Broadcast Patterns.**

Perform this in the "Emergency broadcast pattern settings."

**Emergency broadcast pattern settings**

Number: 1  
Name: Emergency pattem 1  
Sequence: 001: Emergency sequence 1

Phase 1

Message: Alert  
Duration(min): 5

Output: 001: Zone pattem 1  
Control output: 001: Control output pattem 1

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**Assign each function to be used at the time of emergency broadcast to the control inputs of the devices or the key on the remote microphone.**

Perform this in the "Event settings."

EMG	EMGKEY	Emergency broadcast pattern start	001: Emergency pattern 1	
SYS1	SYSKEY1	Emergency broadcast pattern stop	001: Emergency pattern 1	
SYS2	SYSKEY2	Emergency sequence phase shift	001: Emergency sequence 1	
SYS3	SYSKEY3	Emergency reset	002: sign0003	001: Control output pattern 1

**[Emergency broadcast pattern configuration]**

Emergency broadcast pattern	Emergency sequence	Phase 1	Phase 2	Phase 3
		EV message + broadcast duration	EV message + broadcast duration	EV message + broadcast duration
	Output zone	Individual or pattern (multiple zones)	Individual or pattern (multiple zones)	Individual or pattern (multiple zones)
	Control output pattern	Multiple control outputs	Multiple control outputs	Multiple control outputs

**[Emergency broadcast setting example]**

• **Emergency sequence settings**

Emergency sequence 1	Phase 1	Phase 2	Phase 3
	EV message 1, 5-minute broadcast	EV message 2, Continuous broadcast	—

**Note:** Phase 3 is not set in this example.

• **EV message settings**

Message name	Audio file	Type
EV message 1	sign001.wav	Alert
EV message 2	sign002.wav	Evacuation

• **Output zone pattern setting**

		Zones SX-2100AO's output channels					
		1	2	3	4	5	6
Output zone pattern (No.)	1	✓					
	2	✓	✓	✓	✓	✓	✓

• **Control output pattern settings**

Control output pattern (No.)	1	SX-2000SM's control outputs 1 and 2
	2	SX-2100AI's control outputs 1 and 2

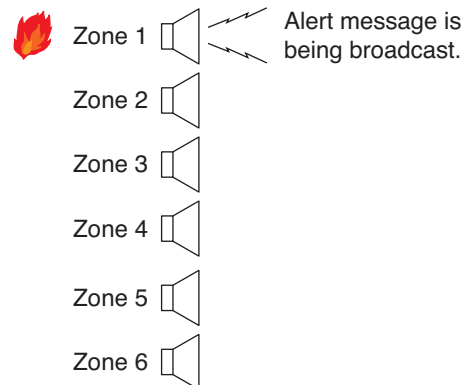
• **Emergency broadcast pattern settings**

Emergency broadcast pattern 1	Emergency sequence	Emergency sequence 1		
		Phase 1	Phase 2	Phase 3
	Output zone	Output zone pattern 1	Output zone pattern 2	——
	Control output pattern	Control output pattern 1	Control output pattern 2	——

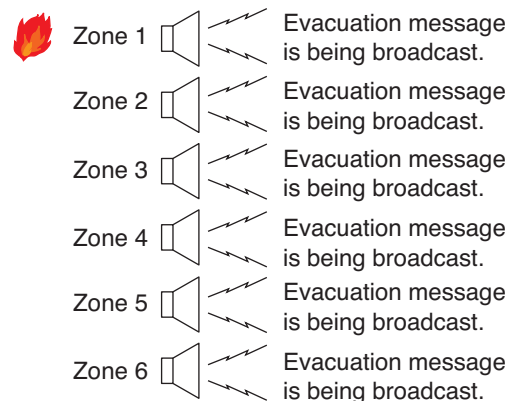
**[Operation example]**

The example here assumes that a fire breaks out in Zone 1.

- (1) When the fire alarm sensor installed in Zone 1 works, the automatic fire alarm system transmits a control signal to the SX-2000 system's control input. Then, the Emergency Broadcast Pattern 1 is activated, allowing the alert message to be broadcast to Zone 1. In this event, SX-2000SM's Control outputs 1 and 2 turn ON. (Phase 1)



- (2) After 5 minutes, Phase 1 is shifted to Phase 2 and the "Evacuation" EV message is broadcast to all zones. In this event, SX-2000SM's Control outputs 1 and 2 turn OFF, while SX-2100AI's Control outputs 1 and 2 turn ON.



## 2.6. Surveillance Function

Surveillance function continuously monitors such status at the major points from input to output of the system as each unit operation, cable connections or communications between the units, and power supply.

If a unit fails or cable breaks, this is notified to the system operator by some means. Failure status of the external equipment can also be accepted and notified.

When a failure has occurred, perform a set of operations: failure reception first to acknowledge failure state and finally failure reset to restore the system to normal using the keys on the SX-2000SM or remote microphone, or control input terminals of the system equipment.

Set the Surveillance intervals, intended surveillance points, and actions at the time of failure occurrence using the SX-2000 Setting Software.

To use the Surveillance function, follow the procedures below to perform each setting.

### Set the Surveillance function to "Used."

Perform this in the "Basic settings."

Surveillance function: Used

### Set the surveillance points of each device.

Perform this in the "Surveillance individual settings."

Surveillance individual settings

SM	DC POWER	SX LINK	ANALOG LINK		DS LINK		RM	
			1	2	1	2	1	2
All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A11	DC POWER	SX LINK	ANALOG LINK OUT	RM			
				1	2	3	4
All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Set the control outputs to be activated at the time of failure detection. \*

Perform this in the "Control output pattern settings."

\* Perform this setting as needed.

Control output pattern settings

Number: 1

Name: Control output pattern 1

SM	SM-COUT1	SM-COUT2	SM-COUT3
A11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	A11-COUT9	A11-COUT10	A11-COUT11

### Assign the "External failure input" function to the control input\*.

Perform this in the "Event settings."

13	A11-CIN13	External failure input	Failure when turning it off
----	-----------	------------------------	-----------------------------

[To the next page](#)

\* Perform these settings as needed.

From the previous page

Select the surveillance target devices or the surveillance points in the SX-2000 system.

Perform this in the "Failure output pattern settings."

Assign the Failure acknowledgement and Failure Status Reset functions to the control inputs of the device or the keys on the remote microphone.

Perform this in the "Event settings."

**[Failure output pattern configuration]**

Failure output pattern	Surveillance target	Each device, each surveillance point (Set the surveillance points of each device in the SX-2000 system in the Surveillance settings individually.)
	External failure input	Control input terminal (Control input set to "External failure input" in the Event settings.)
	Failure state output	Control output pattern (Multiple control outputs)

**[Example of assigning the Surveillance function to the remote microphone]**

• Surveillance individual settings

	Surveillance point				
	Power supply	SX link	-----	Control input 1	-----
SX-2000SM	✓	✓	-----	✓	-----
SX-2100AI (1)	✓	✓	-----	—	-----

• Control output pattern settings

Control output pattern (No.)	3	SX-2000SM's control outputs 3 and 4
	4	SX-2100AI's control outputs 3 and 4

• Remote microphone's function key settings

Key	Function	Contents		
Function key 1	Failure output receipt	Failure output pattern 1	Surveillance target	SX-2000SM
			External failure input	None
			Failure status output	Control output pattern 3
Function key 2	Failure output receipt	Failure output pattern 2	Surveillance target	SX link
			External failure input	None
			Failure status output	Control output pattern 4
Function key 3	Failure output reset	—		

## 3. NOTES ON PERFORMING SETTINGS

### 3.1. System Requirements

- OS: Windows Vista, Windows XP SP2 or later
- CPU: 800 MHz or faster
- Memory: 512 MB or more
- Application software: Microsoft Excel\*<sup>1</sup>, Windows Media Player 9.0 or later\*<sup>2</sup>
- Environment to support CF card\*<sup>3</sup>

\*<sup>1</sup> Needed to print labels using the SX-2000 Setting Software. Use the Microsoft Excel 2007 or later for the Windows Vista or Microsoft Excel 2000 or later for the Windows XP SP2.

\*<sup>2</sup> Needed to preview the EV messages using the SX-2000 Setting Software.

\*<sup>3</sup> Combination of a PC card slot and CF card adapter (supplied), or an external CF card/writer device is needed.

#### **Note**

Windows, Windows Vista, Microsoft Excel, and Windows Media are trademarks of Microsoft Corporation.

## 3.2. Notes

### 3.2.1. Compact flash cards

#### **[Data storage]**

When storing settings data created using the SX-2000 Setting Software on a CF card, use the included card. On the CF card, do not store any files other than those related to the software. Failure to do so may cause the unit malfunction.

#### **[Card Removal & Insertion]**

Do not remove nor insert the CF card while settings data is being written or read, as doing so may cause data loss or damage the card.

#### **[Prohibition]**

Never use any CF card that has been used for other devices.

### 3.2.2. Displays

The SX-2000 Setting Software creates window displays at a resolution of 1024 x 768 pixels. Setting the screen size to a lower resolution or resizing windows may cause a portion of display to be hidden or cut off.

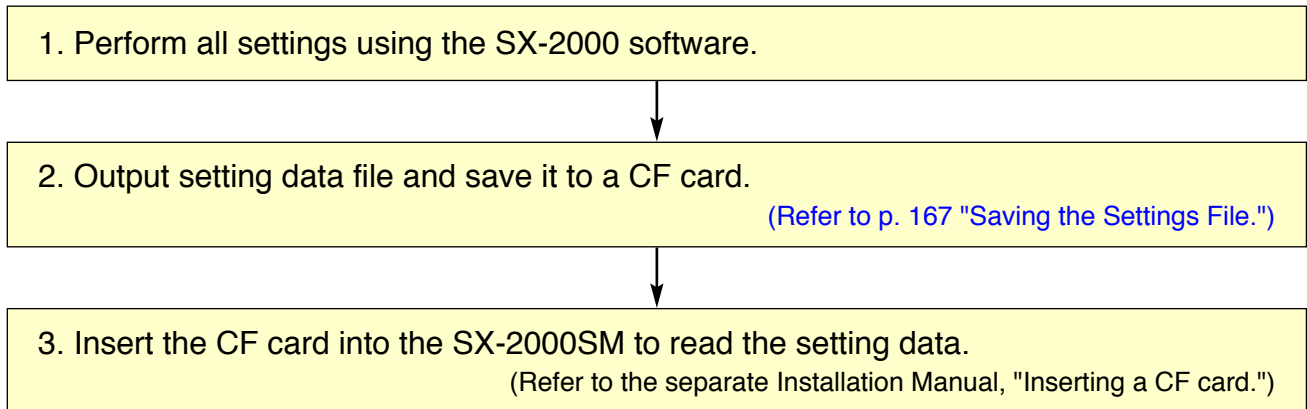
### 3.2.3. Window screens

The windows displayed by the SX-2000 Setting Software in this manual are examples and may vary somewhat depending on the specific environment of the PC used.



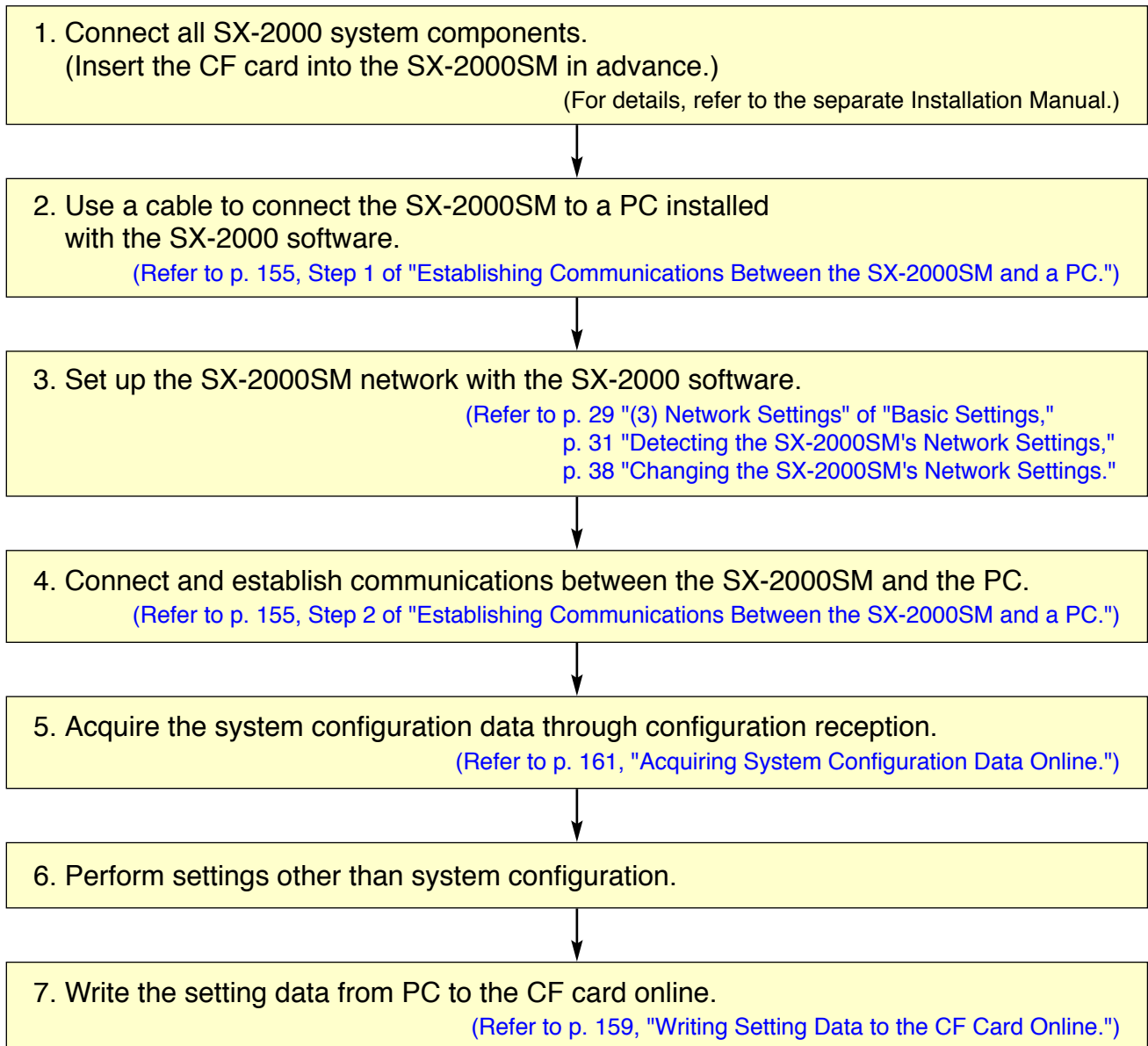
### 3.3. Setting Procedures

#### 3.3.1. Offline operation



#### 3.3.2. Online operation

The following procedure is recommended when performing settings online.



## 4. SOFTWARE SETUP

### Notes

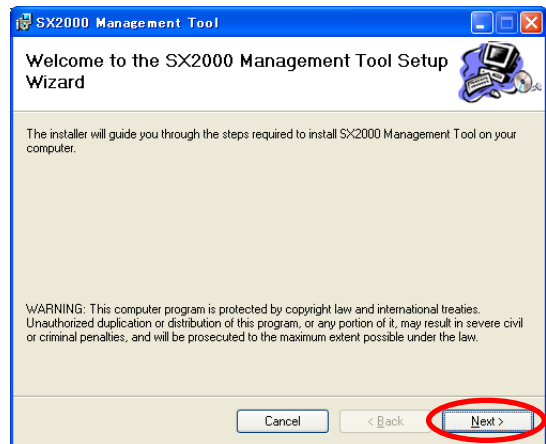
- Close all open applications before installing.
- To install the software, it is necessary to log in to the PC using an administrator account.

### 4.1. Setting Software Installation

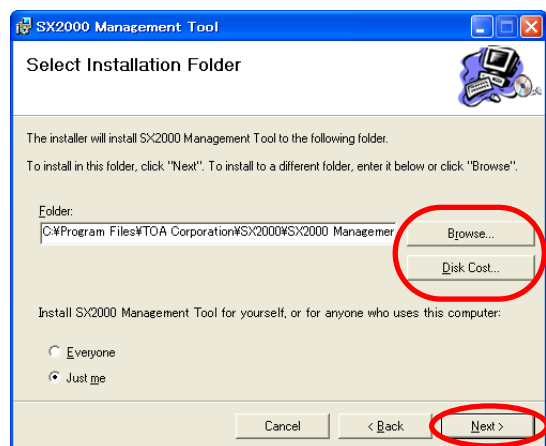
**Step 1.** Click on "setup.exe" in the setting software folder contained in the CD supplied with the SX-2000SM. The installation wizard screen is displayed.

#### Note

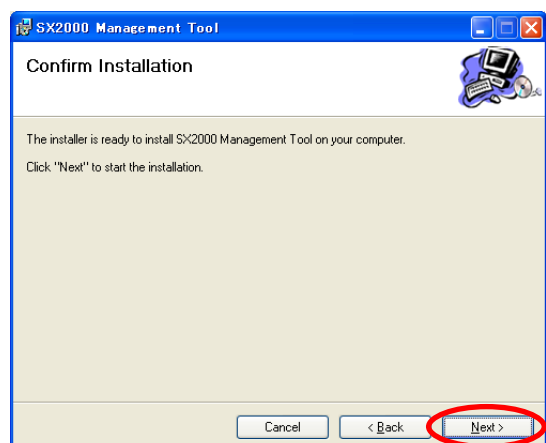
The installation wizard screen may not be displayed. In this case, read [the next page](#).



**Step 2.** Click the [Next] button. The Select Installation Folder screen is displayed.

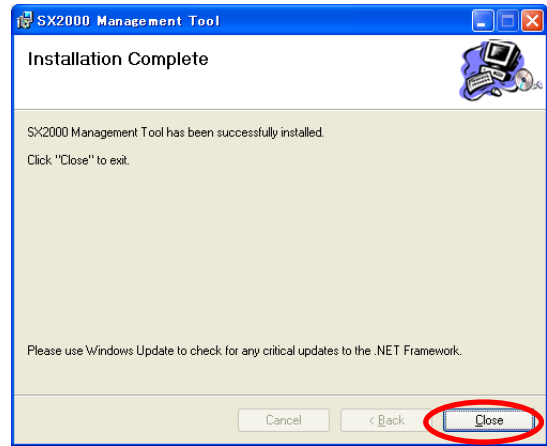


**Step 3.** Change the folder as needed, then click the [Next] button. The Confirm Installation dialog is displayed.



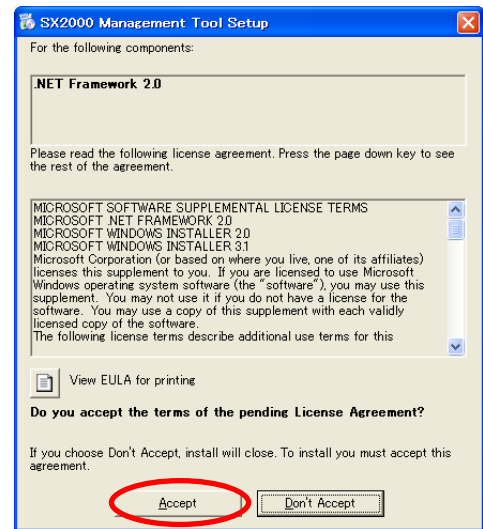
**Step 4.** Click the [Next] button to start installing the software.

**Step 5.** When the Installation Complete dialog is displayed, click the [Close] button to complete the installation.



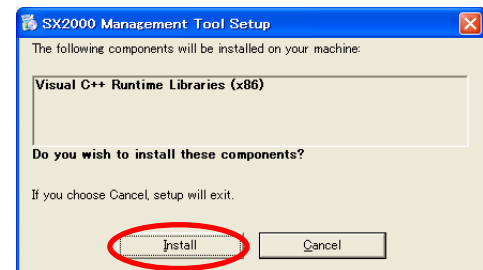
**[If no installation wizard screen is displayed]**

The screen at right may be displayed when the Step 1 is performed. In this case, install the software needed to run the SX-2000 Setting Software with the steps below.



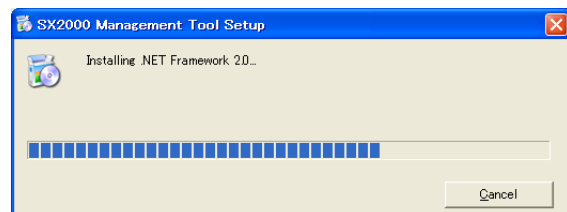
**Step 1.** Click the [Accept] button.

The software installation screen is displayed.



**Step 2.** Click the [Install] button.

Installation in progress screen is displayed.

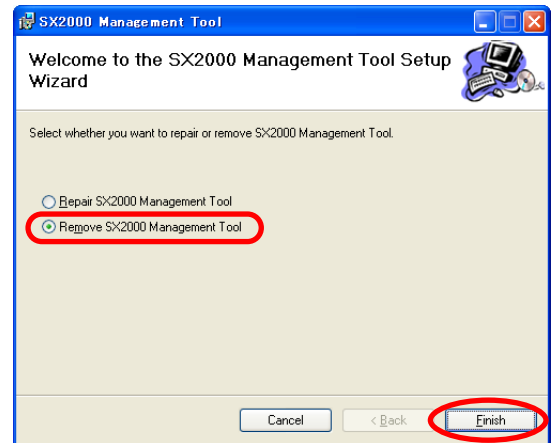


As the installation wizard screen is displayed after completion of installation, follow the steps shown on [the previous page](#).

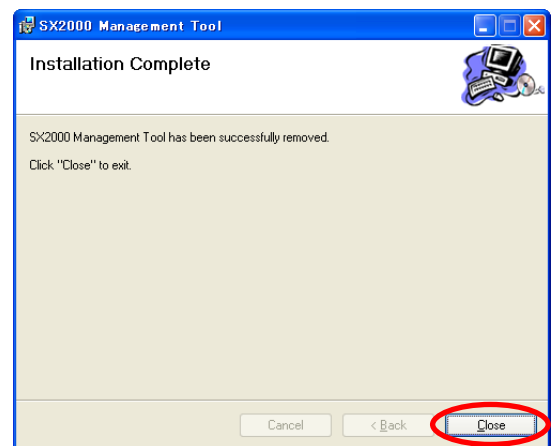
## 4.2. Uninstallation

**Step 1.** Click on "setup.exe" in the setting software folder contained in the CD supplied with the SX-2000SM.  
The setup wizard screen is displayed.

**Step 2.** Select "Remove SX2000 Management Tool," and click the [Finish] button to start uninstalling the software.



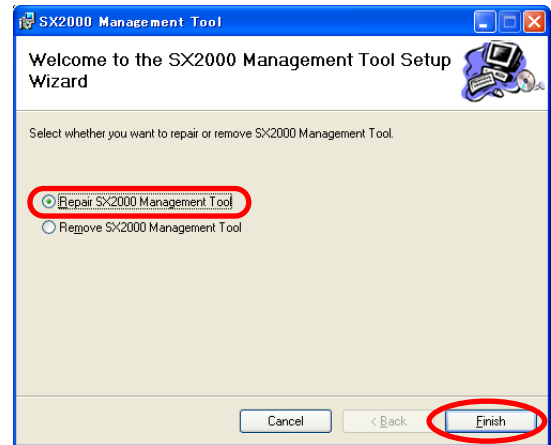
**Step 3.** When the Installation Complete dialog is displayed, click the [Close] button to complete the uninstallation.



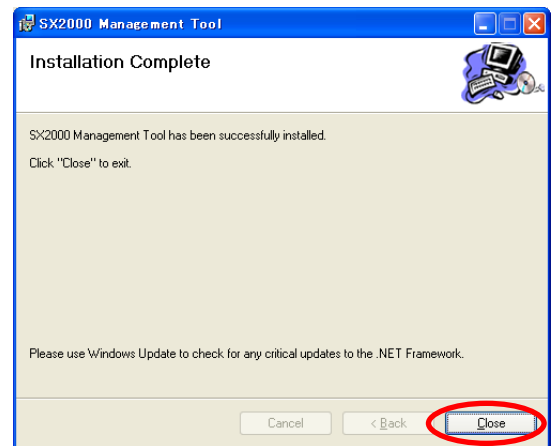
### 4.3. Update

**Step 1.** Click on "setup.exe" in the setting software folder contained in the CD supplied with the SX-2000SM.  
The setup wizard screen is displayed.

**Step 2.** Select "Repair SX2000 Management Tool," and click the [Finish] button to start updating the software.



**Step 3.** When the Installation Complete dialog is displayed, click the [Close] button to complete the update.



## 5. RUNNING THE SX-2000 SETTING SOFTWARE

### 5.1. Running The SX-2000 Setting Software

To start the software, select "TOA Matrix Series → SX2000" from the Start menu, or double-click the SX2000 shortcut icon on the desktop.

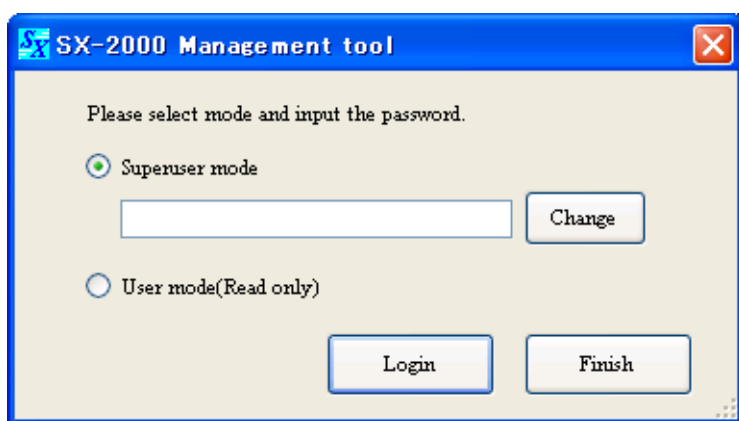
Start menu



Shortcut icon on the desktop



The login screen is displayed.



Two modes are made available for the SX-2000 Setting Software: Superuser mode and User mode, which are different in login method.

In Superuser mode, the setting data can be newly created and the preset data can be edited. This mode requires a login password, which can also be changed in this login screen.

In User mode, no setting data can be changed.

But, it is possible to perform operations requiring no setting data change such as setting content confirmation, setting data's read and print, and label print for the remote microphone.

## 5.2. Login In Superuser Mode

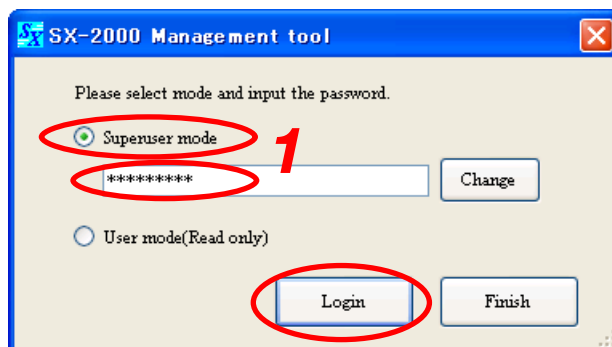
### 5.2.1. How to login

**Step 1.** Select "Superuser mode" in the login screen, then enter the password.

**Note**

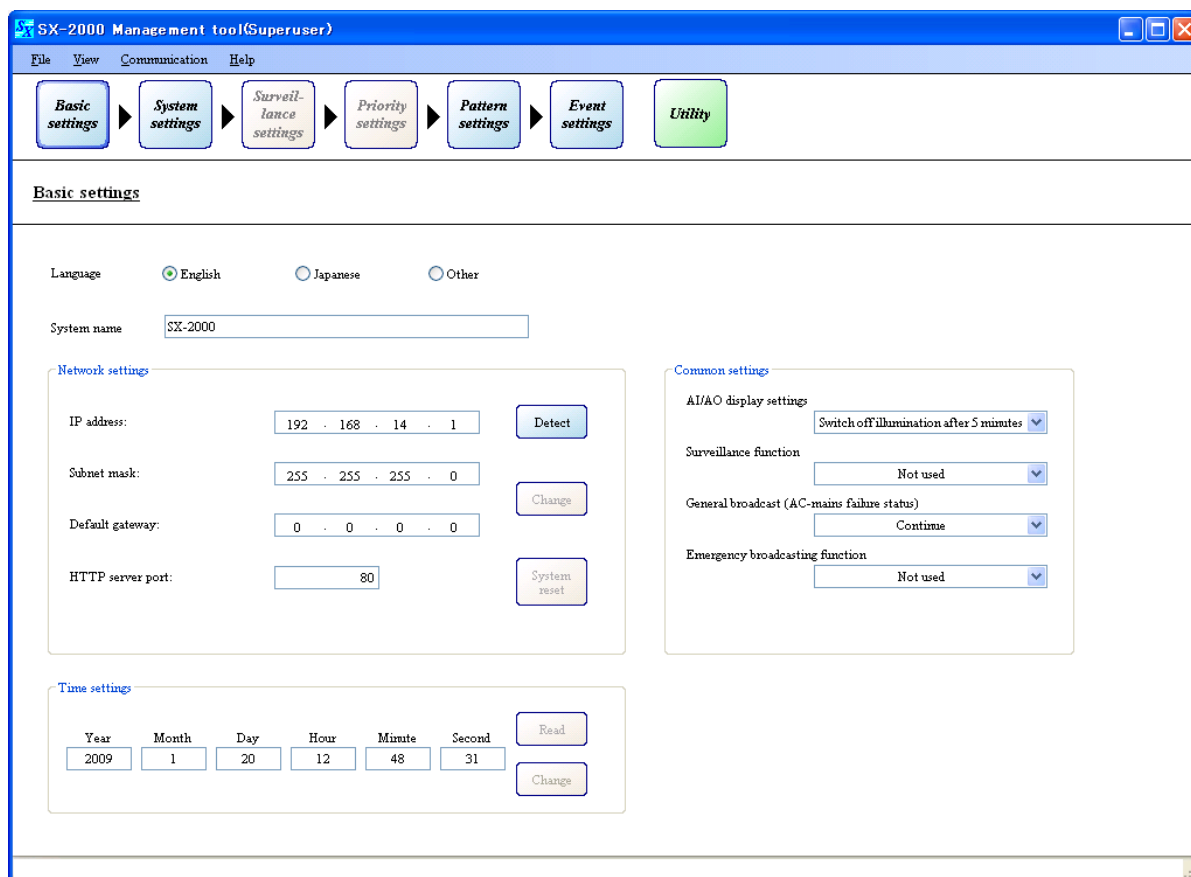
Password is "Superuser" by default.

Passwords are case-sensitive.



**Step 2.** Click the [Login] button.

The initial screen of the Setting Software is displayed.



## 5.2.2. Password change

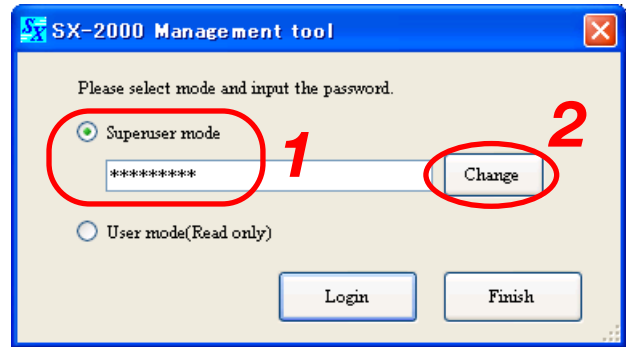
**Step 1.** Select "Superuser mode" in the login screen, then enter the current password.

**Note**

Password is "Superuser" by default.  
Passwords are case-sensitive.

**Step 2.** Click the [Change] button.

The password change screen is displayed.



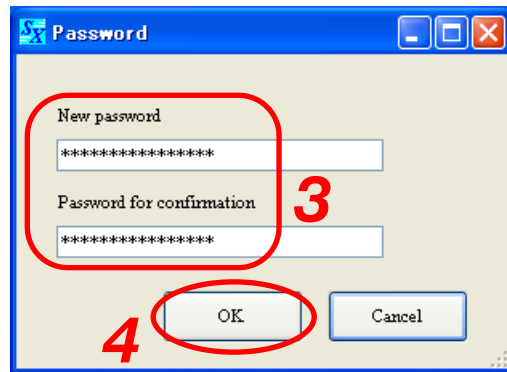
**Step 3.** Enter the desired password in the New password field, then reenter the same desired password in the Password for confirmation field.

**Note**

Up to 16 alphanumeric characters can be used.

**Step 4.** Click the [OK] button.

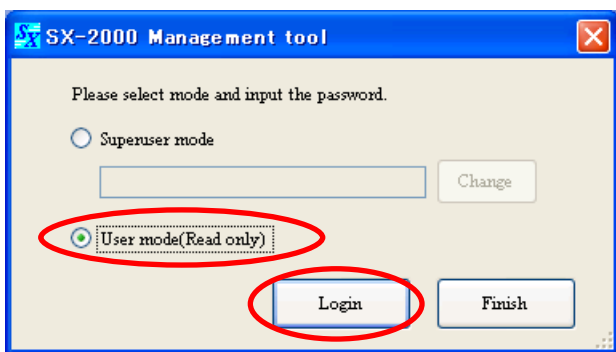
The display reverts to the login screen.



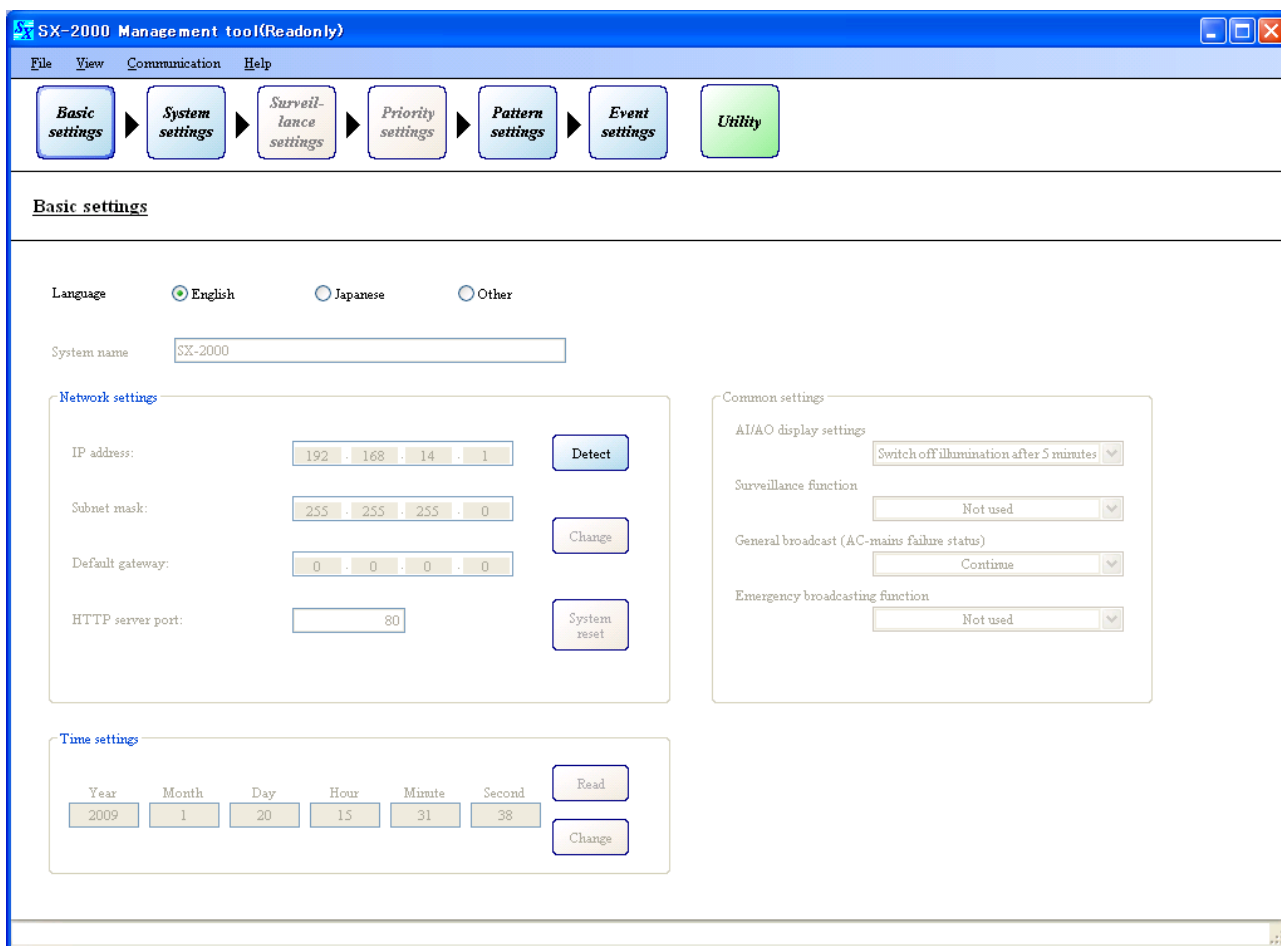


### 5.3. Login In User Mode

Select "User mode (Read only)" in the login screen, then click the [Login] button.



The initial screen of the Setting Software is displayed. The data shaded in gray cannot be changed.



#### Note

When changing the mode from User to Superuser, first exit and restart it, then login again in Superuser mode.

## 6. SETTING ITEMS AND PROCEDURES

Setting item buttons are located in the upper portion of the screen.

The entire system setting is divided into 6 steps of settings starting with "Basic settings" to "Event settings" from left to right. Be sure to make settings in this order.

Clicking on each setting item button displays the corresponding setting screen in the main area below the setting item buttons.

Setting items

The screenshot displays the 'SX-2000 Management tool(Superuser)' interface. At the top, a navigation bar contains seven buttons: 'Basic settings', 'System settings', 'Surveillance settings', 'Priority settings', 'Pattern settings', 'Event settings', and 'Utility'. A red box highlights these buttons, with a red line pointing to the 'Setting items' label above them. The 'Basic settings' screen is active, showing the following configuration options:

- Language:** Radio buttons for English (selected), Japanese, and Other.
- System name:** Text field containing 'SX-2000'.
- Network settings:**
  - IP address: 192 . 168 . 14 . 1 (Detect button)
  - Subnet mask: 255 . 255 . 255 . 0 (Change button)
  - Default gateway: 0 . 0 . 0 . 0
  - HTTP server port: 80 (System reset button)
- Common settings:**
  - AI/AO display settings: Switch off illumination after 5 minutes (dropdown)
  - Surveillance function: Not used (dropdown)
  - General broadcast (AC-mains failure status): Continue (dropdown)
  - Emergency broadcasting function: Not used (dropdown)
- Time settings:**

Year	Month	Day	Hour	Minute	Second	Read
2009	1	20	12	48	31	Change

## 6.1. Menu Configuration

Basic settings (p. 29)	Language setting (p. 29)	Select the displayed language.
	System name setting (p. 29)	Set the desired system name.
	Network settings (p. 29)	Make network-related settings.
	Common settings (p. 30)	Make settings related to the SX-2000AI/2100AI/2000AO/2100AO, Surveillance function, and Emergency.
	Time settings (p. 30)	Set the current time for the SX-2000SM.
System settings (p. 44)	SX-2000SM (p. 45)	Set each name of the control inputs and outputs, and register EV messages.
	SX-2000AI, SX-2100AI (p. 50)	Configure the modules used for the SX-2000AI or SX-2100AI, and set each name of the control inputs and outputs.
	RM-200SF (p. 55)	Make function settings and set the unit name.
	RM-200S, RM-200SA (p. 58)	Make function settings and set the unit name.
	SX-2000AO, SX-2100AO (p. 61)	Configure the audio outputs, and set each name of the control inputs and outputs.
	SX-2000CI (p. 65)	Set each name of the control inputs.
	SX-2000CO (p. 67)	Set each name of the control outputs.
Surveillance settings (p. 69)	Interval settings (p. 69)	Set the start time and interval time for confirming failure status of the external devices.
	Surveillance individual settings (p. 70)	Set each device's individual points to be detected for failure.
Priority settings (p. 71)	Priority settings (p. 71)	Set the priority levels for General-purpose, Emergency, and BGM broadcasts.
Pattern settings (p. 74)	Output zone pattern settings (p. 77)	Set broadcast zones as Output zone pattern.
	BGM pattern settings (p. 78)	Set BGM broadcast zones as BGM pattern.
	General broadcast pattern settings (p. 79)	Set General-purpose broadcast zones as General broadcast pattern.
	Control output pattern settings (p. 81)	Set the control outputs to use as Control output pattern.
	Emergency sequence settings (p. 82)	Set the sequence of Emergency broadcast.
	Emergency broadcast pattern settings (p. 83)	Register a set of Emergency sequence, output zone, and control output pattern as Emergency broadcast pattern.
Event settings (p. 87)	Failure output pattern settings (p. 85)	Set detection points for failure as Failure output pattern.
	System event settings (p. 100)	Set control output patterns invoked in Emergency broadcast state or at power failure.
	SM event settings (p. 101)	Assign functions to the control inputs.
	AI event settings (p. 105)	Assign functions to the function keys, channel keys, and control inputs.
	AO event settings (p. 109)	Assign functions to the function keys, channel keys, and control inputs.
	RM event settings (p. 112)	Assign functions to the keys.
Utility (p. 120)	CI event settings (p. 119)	Assign functions to the control inputs.
	Log file display (p. 121)	Displays the log data stored on the CF card, and exports the log data.
	Online log (p. 125)	Displays log data online.
	System status (p. 128)	Displays system configuration or failure status online.
	Audio input and output status (p. 147)	Displays audio input and output status online.
	Control input and output status (p. 151)	Displays control input and output status online.

## 6.2. Menu Bar

### • **File**

<u>N</u> ew:	Creates a new file of data set using the SX-2000 Setting Software.
<u>O</u> pen:	Reads the stored data of the SX-2000 Setting Software.
<u>S</u> ave:	Saves data of the SX-2000 Setting Software in edit.
<u>D</u> ata output ( <u>P</u> ):	
<u>S</u> etting data ( <u>C</u> ):	Exports the setting data in csv format.
<u>R</u> M label ( <u>L</u> ):	Exports the data for creating the RM-200SF's, RM-200S's, RM-200SA's, and RM-210's label in xls format.
<u>E</u> xit:	Exits the SX-2000 Setting Software.

### • **View**

<u>B</u> asic settings:	Moves to the Basic settings screen.
<u>S</u> ystem settings:	Moves to the System settings screen.
<u>S</u> urveillance settings ( <u>V</u> ):	Moves to the Surveillance settings screen.
<u>P</u> riority settings:	Moves to the Priority settings screen.
<u>P</u> attern settings ( <u>A</u> ):	Moves to the Pattern settings screen.
<u>E</u> vent settings:	Moves to the Event settings screen.
<u>U</u> tility:	Moves to the Utility screen.
<u>M</u> odule box:	Displays or hides the Module box in the System settings screen.
<u>R</u> M box:	Displays or hides the RM box in the System settings screen.
<u>U</u> nit box:	Displays or hides the Unit box in the System settings screen.

### • **Communication**

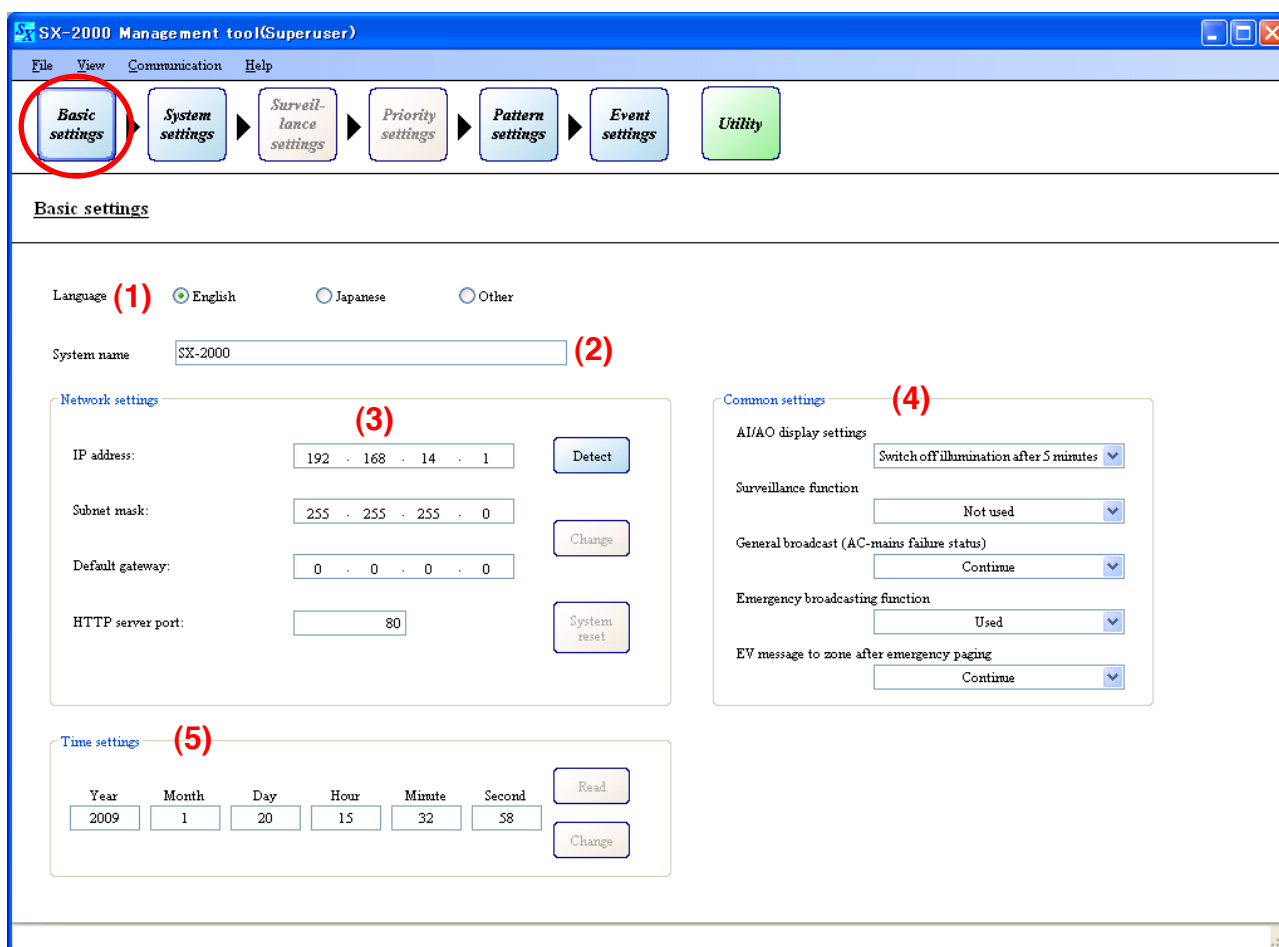
<u>C</u> onnect (F5):	Initiates communications between the SX-2000SM and a PC. (Refer to <a href="#">p. 155 "Establishing Communications Between the SX-2000SM and a PC."</a> )
<u>D</u> isconnect (Shift + F5):	Terminates communications between the SX-2000SM and the PC.
<u>S</u> X CF Online read [SX -> PC] ( <u>R</u> ):	Reads setting data from the CF card.
<u>S</u> X CF Online write [PC -> SX] ( <u>W</u> ):	Writes setting data to the CF card.
<u>R</u> eceive configuration ( <u>S</u> ):	Receives current system configuration information.
<u>R</u> eceive all log files ( <u>L</u> ):	Acquires all log data contained in the CF card.

### • **Help**

<u>V</u> ersion ( <u>A</u> ):	Displays the version number of the SX-2000 Setting Software.
-------------------------------	--

## 7. BASIC SETTINGS

Pressing the [Basic settings] button displays the screen below.



### (1) Language Setting

Select the language to use.

**Note:** "Other" is not used.

Available Settings	English (default), Japanese, Other
--------------------	------------------------------------

### (2) System Name Setting

Enter the system name.

Available Settings	Up to 32 alphanumeric characters. (default: SX-2000)
--------------------	--

### (3) Network Settings

Set the IP address, subnet mask, default gateway, and HTTP server port.

The network settings are used for online connection. Perform settings according to the network environment of the PC to be connected.

Consult the network administrator for details.

[Default settings]

- IP address: 192.168.14.1
- Subnet mask: 255.255.255.0
- Default gateway: 0.0.0.0
- HTTP server port: 80

Connecting the SX-2000SM to a PC makes it possible to acquire and modify the SX-2000SM's network settings. (Refer to [p. 31 "Detecting the SX-2000SM's Network Settings,"](#) [p. 38 "Changing the SX-2000SM's Network Settings."](#))

**(4) Common Settings****• AI/AO display settings**

Select the extinguish time for the vacuum fluorescent displays (VFD) on the SX-2000AI, SX-2100AI, SX-2000AO, and SX-2100AO.

Available Settings	Switch off illumination after 5 minutes (default), Always illumination
--------------------	--

When "Switch off illumination after 5 minutes" is selected for the VFD's extinguish time, the screen automatically goes out if no operation is performed for 5 minutes. Pressing any keys other than the function keys on the front panel resets the screen display.

**Note**

The VFD is an expendable item.

Its display quality deteriorates with age.

As operation in "Always illumination" mode will accelerate aging, normally set to "Switch off illumination after 5 minutes."

**• Surveillance function setting**

Set whether or not to use this function in each individual part of the SX-2000SM, SX-2000AI, SX-2100AI, SX-2000AO, SX-2100AO, SX-2000CI, SX-2000CO, RM-200SF, and RM-200SA.

Available Settings	Not used (default), Used
--------------------	--------------------------

**• General broadcast (AC-mains failure status)**

Set whether or not general broadcasts will be continued when a power failure occurs.

Available Settings	Continue (default), Stop
--------------------	--------------------------

**• Emergency broadcasting function**

Set whether or not to use the Emergency Broadcasting function.

Available Settings	Not used (default), Used
--------------------	--------------------------

**• EV message to zone after emergency paging**

Set whether to enable or disable EV Message (broadcast of the message registered as sound source of the emergency broadcast) to the zones after the Emergency RM broadcast by microphone announcement is completed.

Available Settings	Continue (default), Stop
--------------------	--------------------------

**Note:** This function is available only when the "Emergency" broadcast function is set to "Used."

**(5) Time Settings**

Set the year, month, day, hour, minute, and second. (Refer to [p. 42](#))

## 7.1. Detecting the SX-2000SM's Network Settings

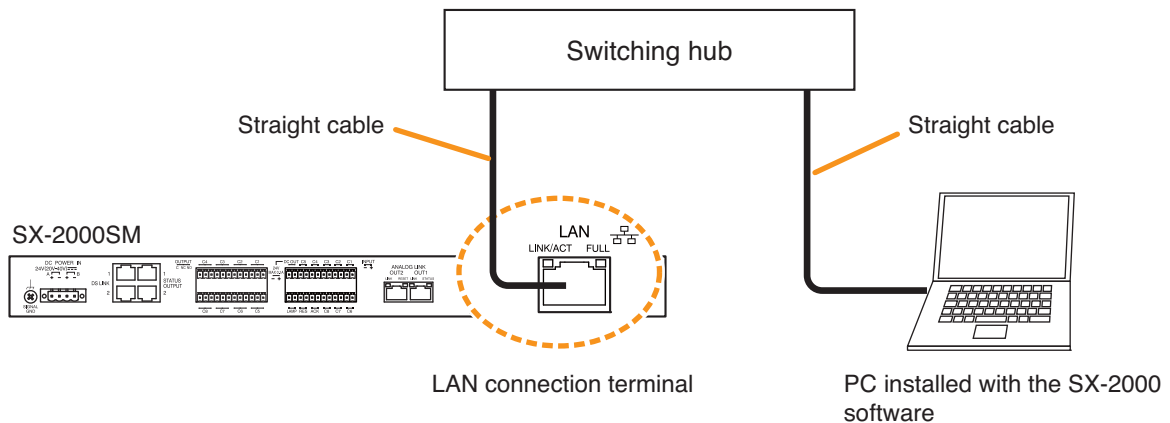
It is possible to acquire the SX-2000SM's network settings by connecting the SX-2000SM to a PC.

### 7.1.1. When a single SX-2000SM is connected to the switching hub

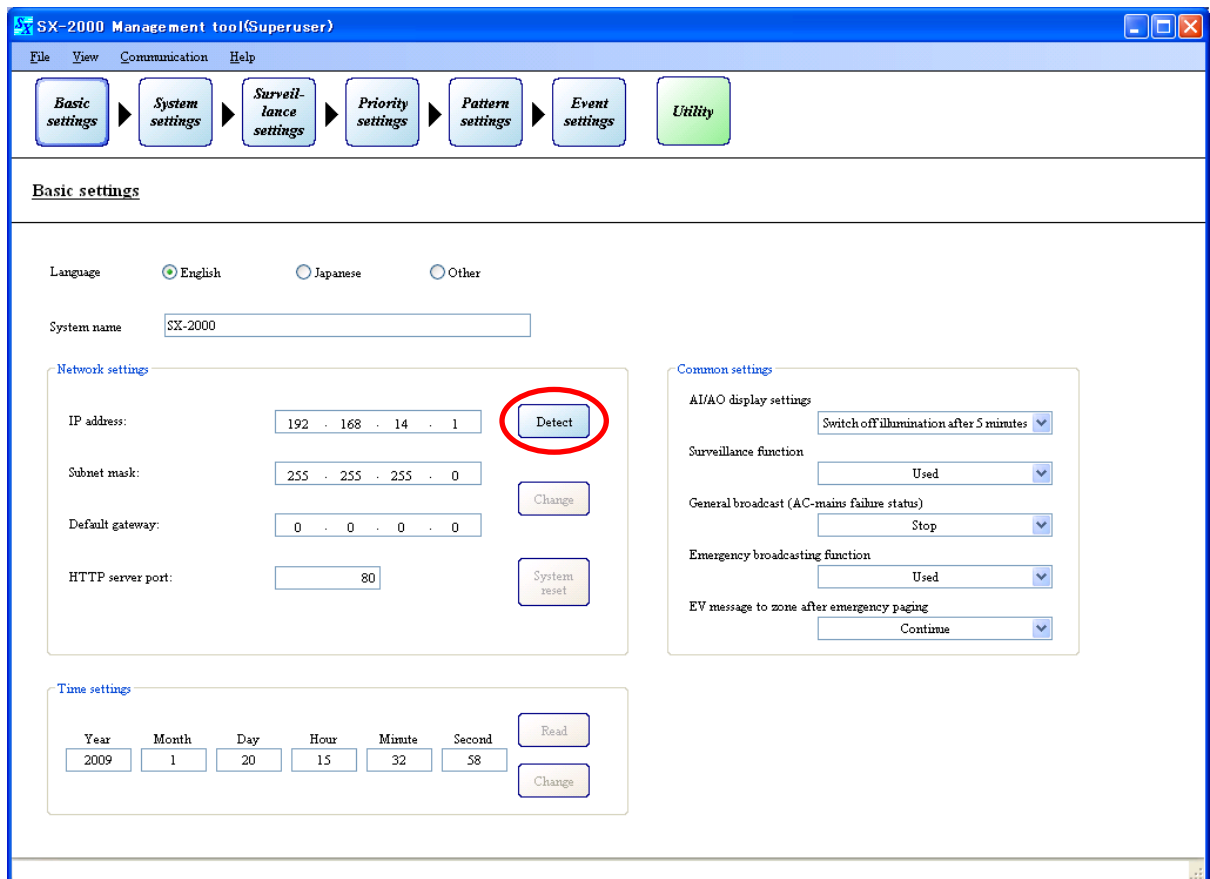
- Step 1.** Connect the SX-2000SM and the PC installed with the SX-2000 software to the switching hub.  
Connect the SX-2000SM's LAN connection terminal to a 10BASE-T- or 100BASE-TX-compatible switching hub.  
Use STP Category 5 Standard straight LAN cable fitted with RJ45 connectors.

#### Notes

- Do not connect the switching hub to the LAN.
- Avoid directly connecting the SX-2000SM to the PC via a cross cable.



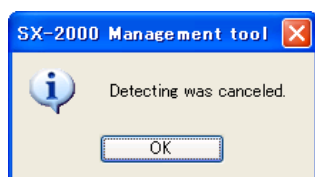
- Step 2.** Click the [Detect] button.



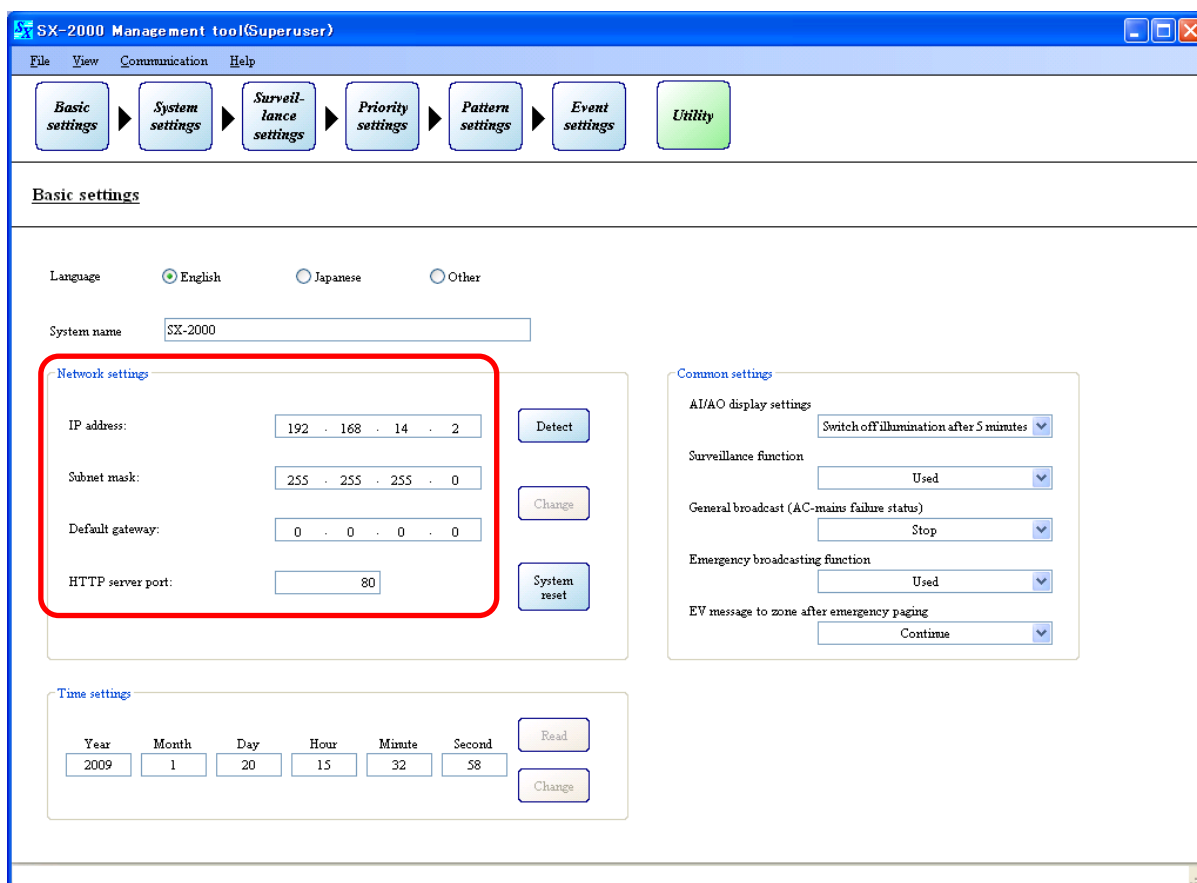
Communications begin.  
The following screen is displayed during communications.



Pressing the [Cancel] button during communications displays the following screen.



The detected SX-2000SM's network settings are displayed after communication is completed.



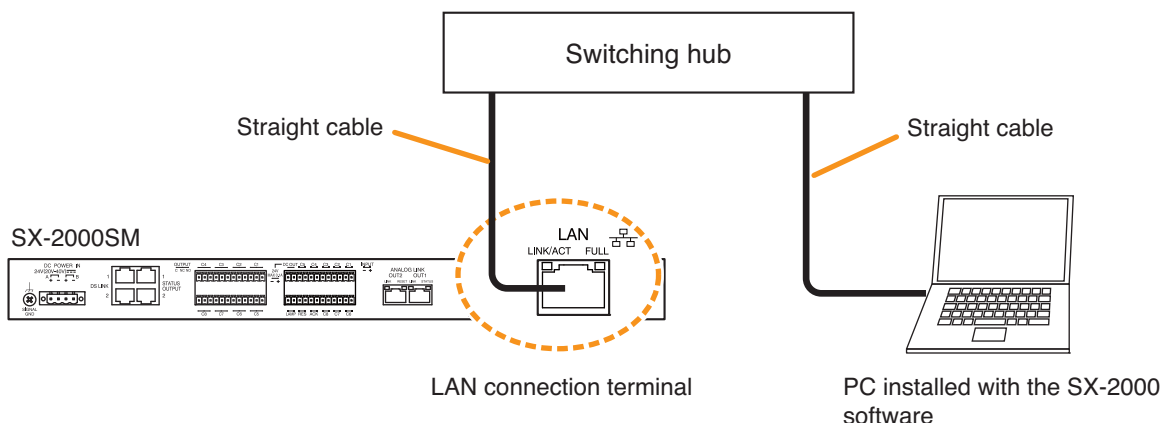


### 7.1.2. When the PC is set for multiple networks

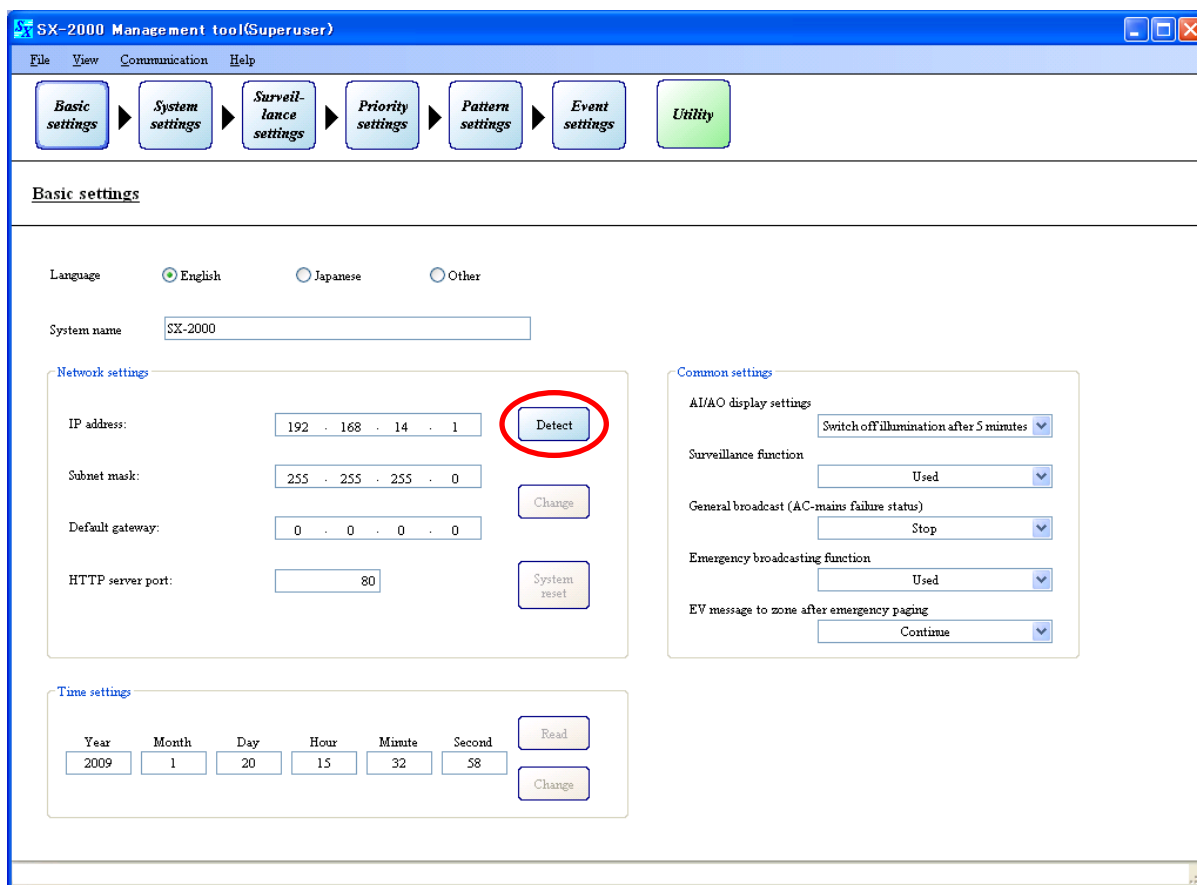
**Step 1.** Connect the SX-2000SM and the PC installed with the SX-2000 software to the switching hub.  
Connect the SX-2000SM's LAN connection terminal to a 10BASE-T- or 100BASE-TX-compatible switching hub.  
Use STP Category 5 Standard straight LAN cable fitted with RJ45 connectors.

#### Notes

- Do not connect the switching hub to the LAN.
- Avoid directly connecting the SX-2000SM to the PC via a cross cable.



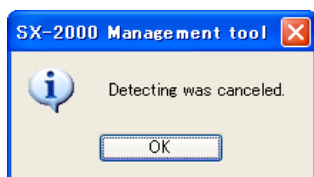
**Step 2.** Click the [Detect] button.



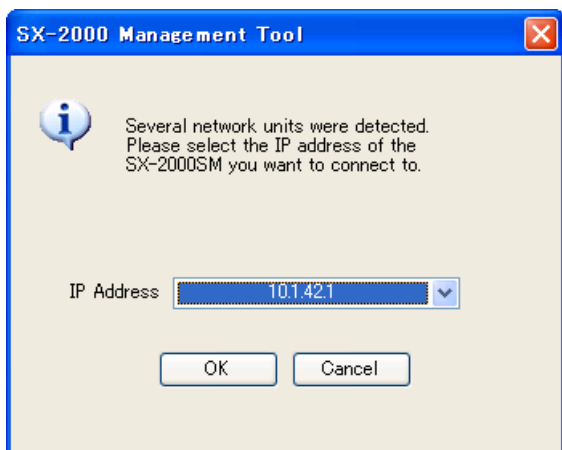
Communications begin.  
The following screen is displayed during communications.



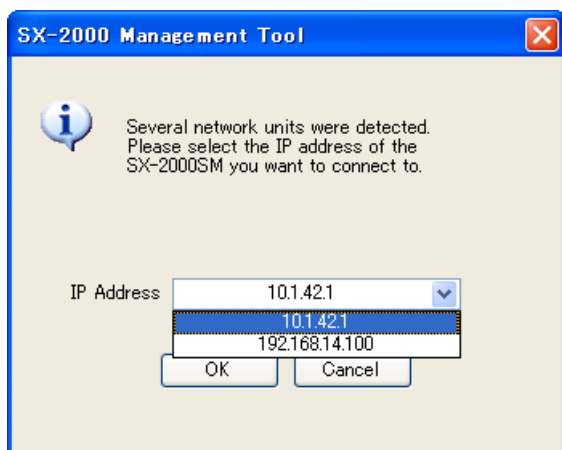
Pressing the [Cancel] button during communications displays the following screen.



The screen for IP address selection is displayed after communication is completed.



**Step 3.** Select the IP address to be used, then press the [OK] button.



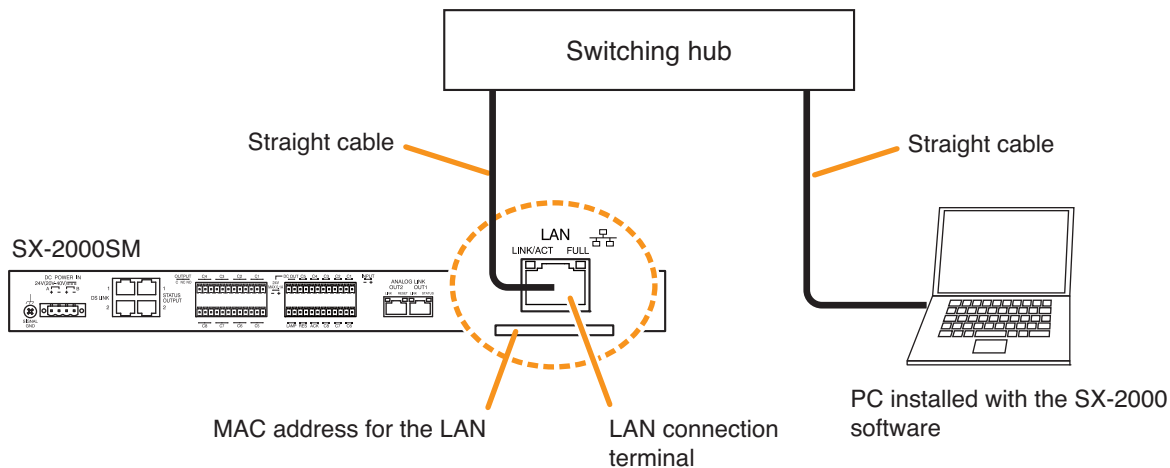
The detected SX-2000SM's network settings are displayed.

### 7.1.3. When multiple SX-2000SMs are connected to a switching hub

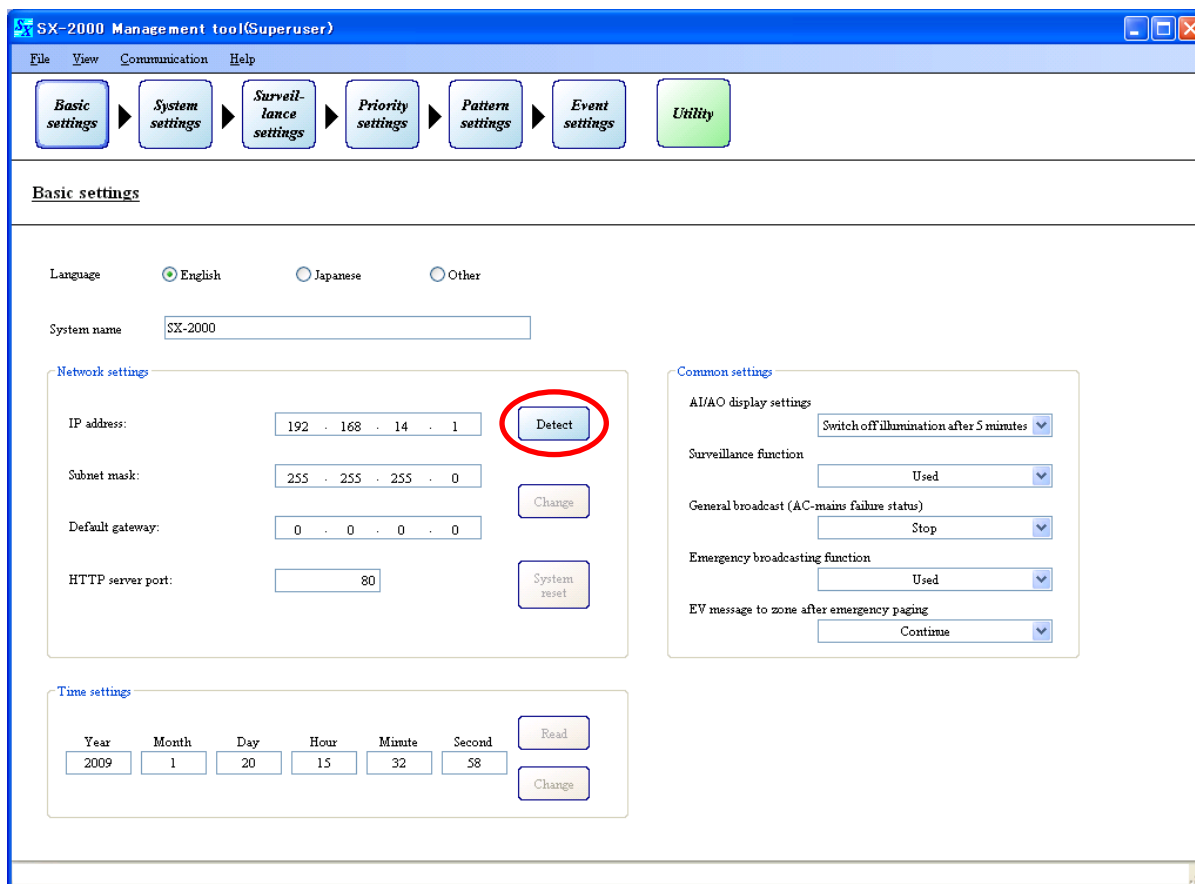
**Step 1.** Connect the SX-2000SM and the PC installed with the SX-2000 software to the switching hub.  
Connect the SX-2000SM's LAN connection terminal to a 10BASE-T- or 100BASE-TX-compatible switching hub.  
Use STP Category 5 Standard straight LAN cable fitted with RJ45 connectors.

**Notes**

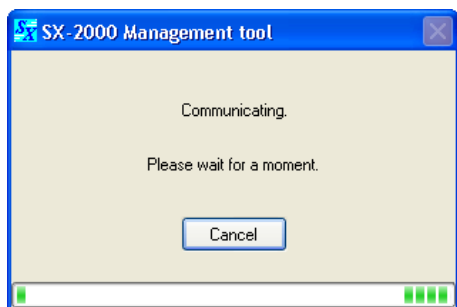
- Do not connect the switching hub to the LAN.
- Avoid directly connecting the SX-2000SM to the PC via a cross cable.



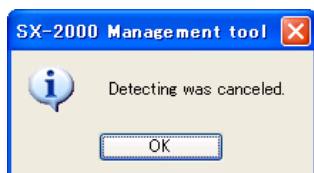
**Step 2.** Click the [Detect] button.



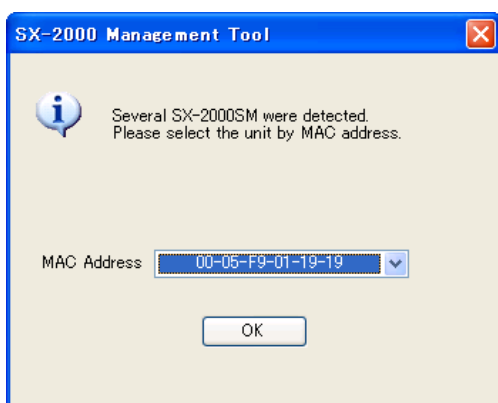
Communications begin. The following screen is displayed during communications.



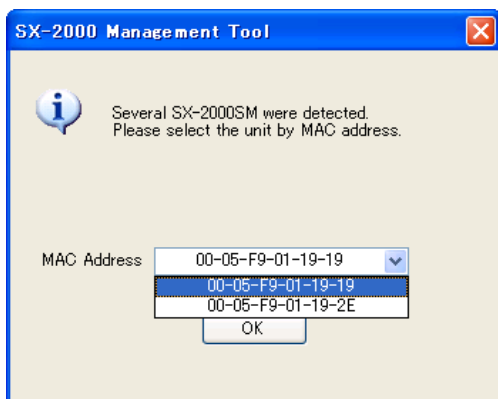
Pressing the [Cancel] button during communications displays the following screen.



The screen for MAC address selection is displayed after communication is completed.



**Step 3.** Select the MAC address of the SX-2000SM to be detected, then press the [OK] button. Refer to the MAC address for the LAN shown on the SX-2000SM's rear panel.



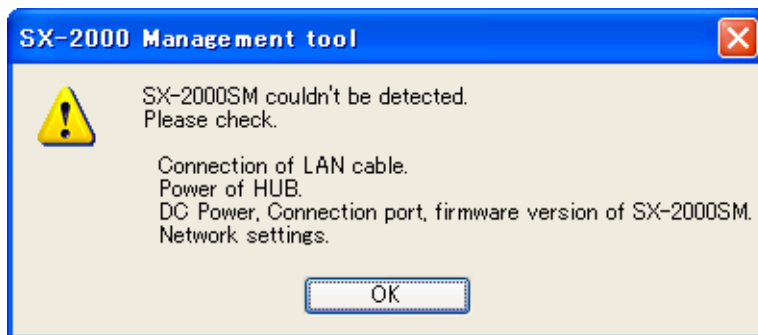
The detected SX-2000SM's network settings are displayed.

**Note**

If the same IP address is duplicated among the SX-2000SMs connected to the switching hub, correct communications may not be established between the SX-2000SM and the PC (p. 155). Be sure to confirm the IP addresses of all connected SX-2000SMs. If an address is found to be duplicated, change the network settings following Step 3. (Refer to p. 38 "Changing the SX-2000SM's Network Settings.") Make communication connections only after assuring that different IP addresses are set for all SX-2000SMs.

#### 7.1.4. When no SX-2000SM's network settings are detected

When the SX-2000SM's network settings were not detected, the following screen is displayed.



If this display appears, the following causes can be considered.

Connection of LAN cable	LAN cables not connected.
	Not straight cable but cross cable is connected.
	STP Category 5 Standard straight cable with RJ45 connectors is not used.
Power of HUB	Switching hub is not powered.
	The distance between the SX-2000SM and the switching hub is more than 100 m.
DC power of SX-2000SM	Power is not supplied to the SX-2000SM.
Connection port of SX-2000SM	Cable is not connected to the SX-2000SM's LAN connector.
Firmware version of SX-2000SM	The SX-2000SM firmware is earlier than Version 3.00. Since its latest version is made available on the TOA product download site ( <a href="http://toa-products.com/">http://toa-products.com/</a> ), please download it for use.
Network settings	The IP address, subnet mask, default gateway or HTTP server port of the SX-2000SM or PC is not correctly set.

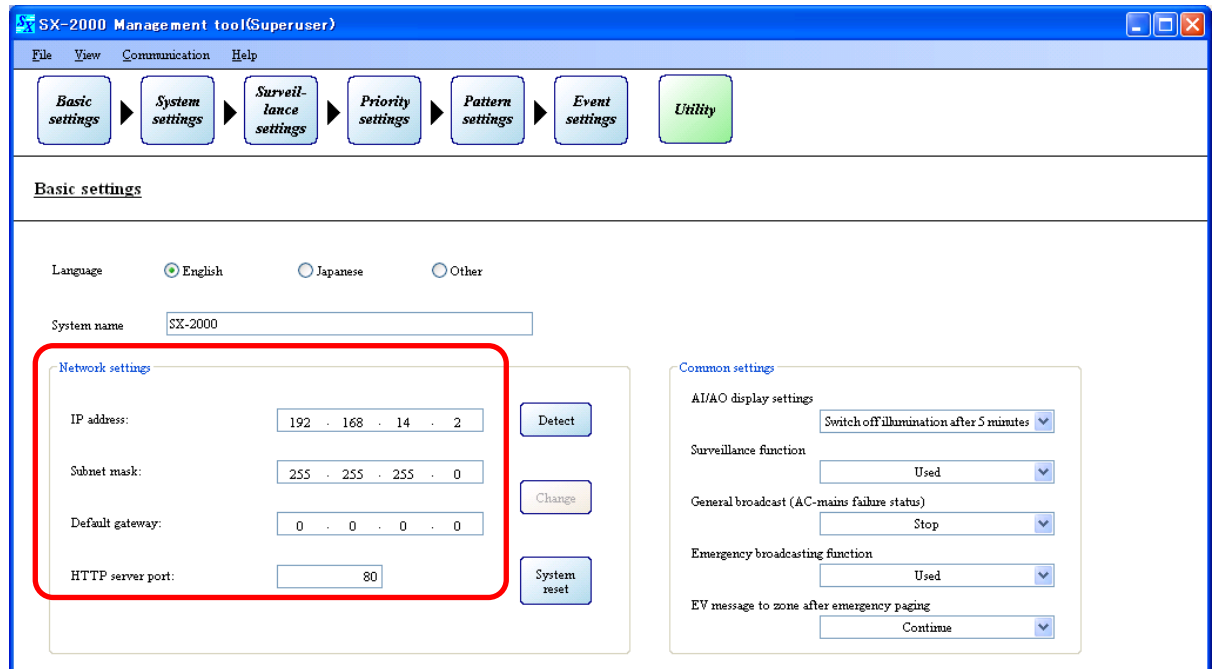
## 7.2. Changing the SX-2000SM's Network Settings

The IP address, subnet mask, default gateway and HTTP server port settings can be changed after detecting the SX-2000SM's network settings.

**Step 1.** Change the network setting values after detecting the SX-2000SM's network settings.

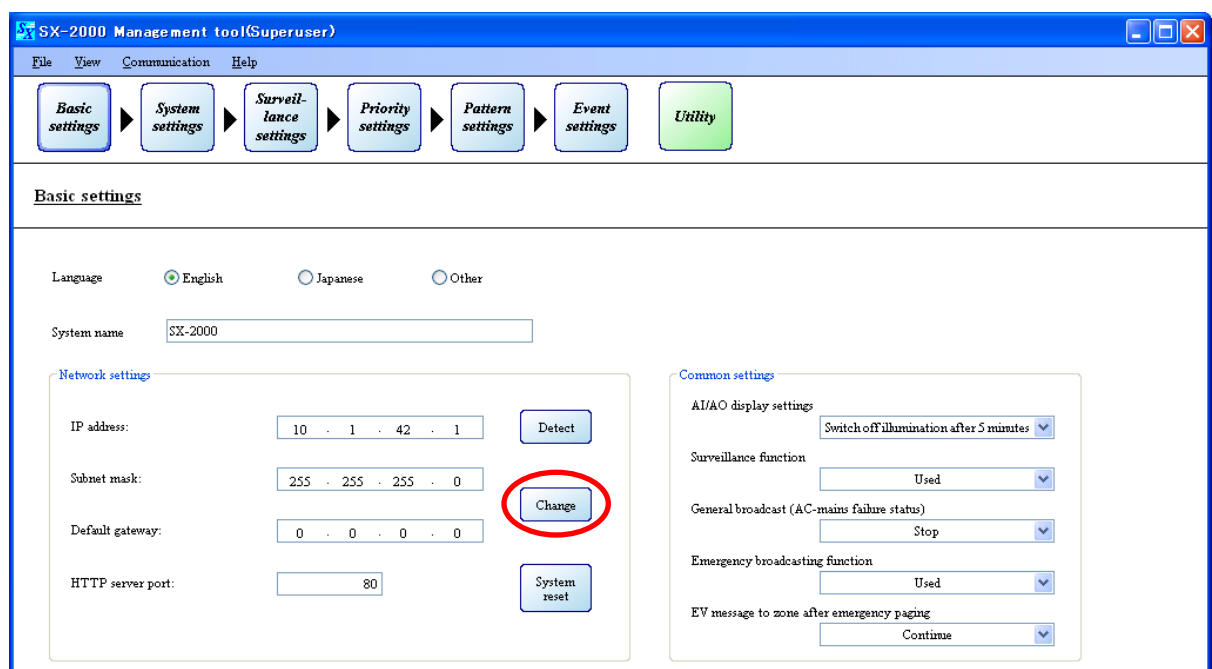
### Note

For network setting detection, refer to [p. 31 "Detecting the SX-2000SM's Network Settings."](#)



The [Change] button can be used after the values have been changed.

**Step 2.** Click the [Change] button.



Changes in network settings are reflected in the SX-2000SM.

The screenshot shows the 'SX-2000 Management tool(Superuser)' window. The menu bar includes 'File', 'View', 'Communication', and 'Help'. A navigation bar contains buttons for 'Basic settings', 'System settings', 'Surveillance settings', 'Priority settings', 'Pattern settings', 'Event settings', and 'Utility'. The 'Basic settings' page is active, showing the following configuration options:

- Language:** Radio buttons for English (selected), Japanese, and Other.
- System name:** Text field containing 'SX-2000'.
- Network settings:**
  - IP address: 10 . 1 . 42 . 1 (Detect button)
  - Subnet mask: 255 . 255 . 255 . 0 (Change button)
  - Default gateway: 0 . 0 . 0 . 0
  - HTTP server port: 80 (System reset button)
- Common settings:**
  - A/AO display settings: Switch off illumination after 5 minutes (dropdown)
  - Surveillance function: Used (dropdown)
  - General broadcast (AC-mains failure status): Stop (dropdown)
  - Emergency broadcasting function: Used (dropdown)
  - EV message to zone after emergency paging: Continue (dropdown)
- Time settings:**

Year	Month	Day	Hour	Minute	Second	Read
2009	1	20	15	32	58	Change

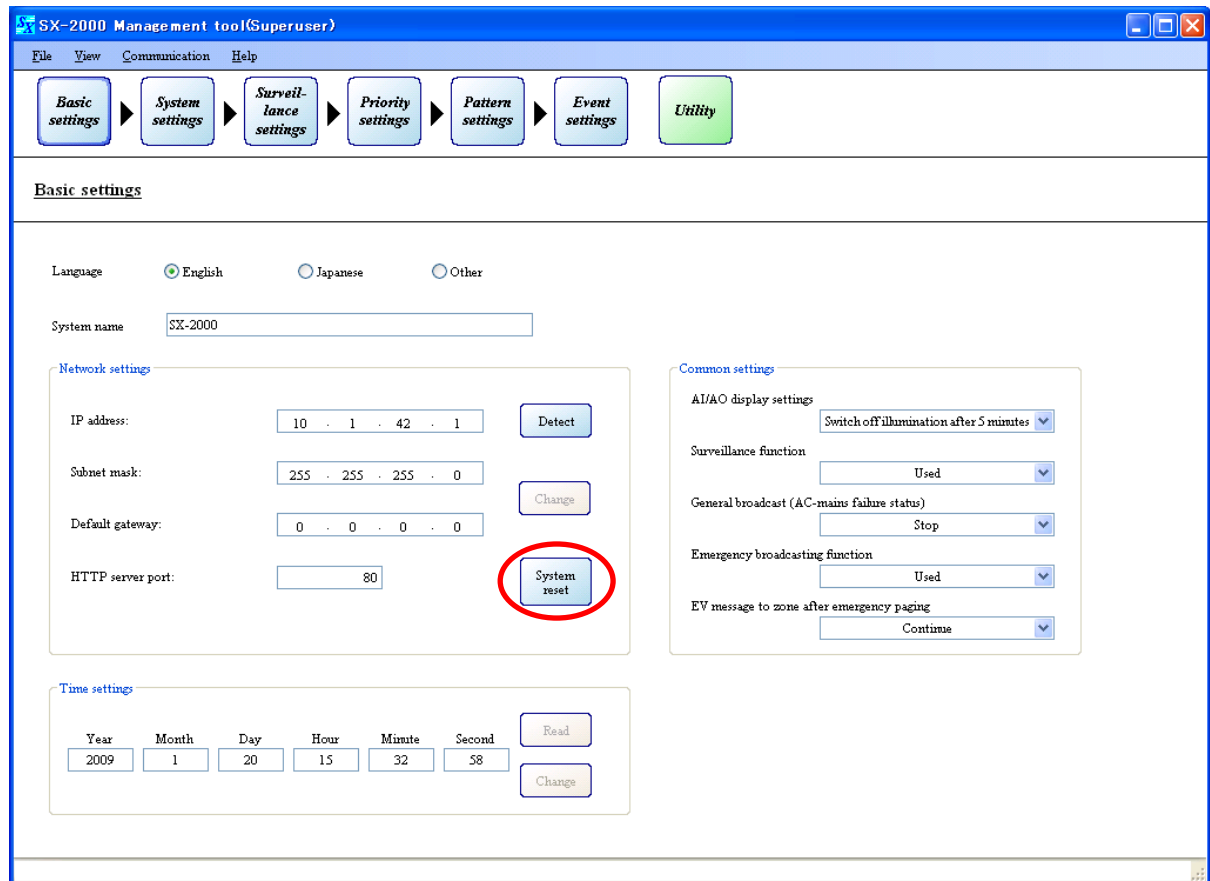
## 7.3. Resetting the System

The SX-2000 system can be reset through remote operation.

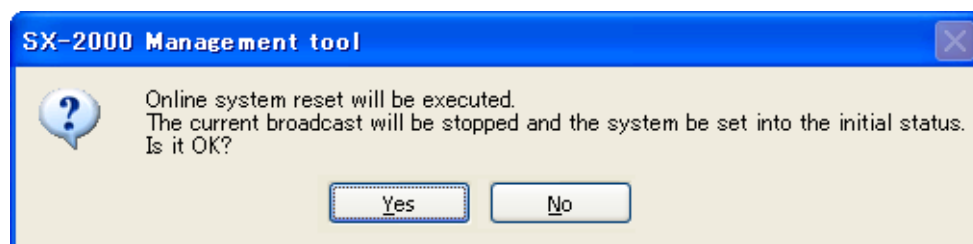
**Step 1.** Click the [System reset] button after detecting the SX-2000SM's network settings.

**Note**

For network setting detection, refer to [p. 31 "Detecting the SX-2000SM's Network Settings."](#)



The following screen is displayed.

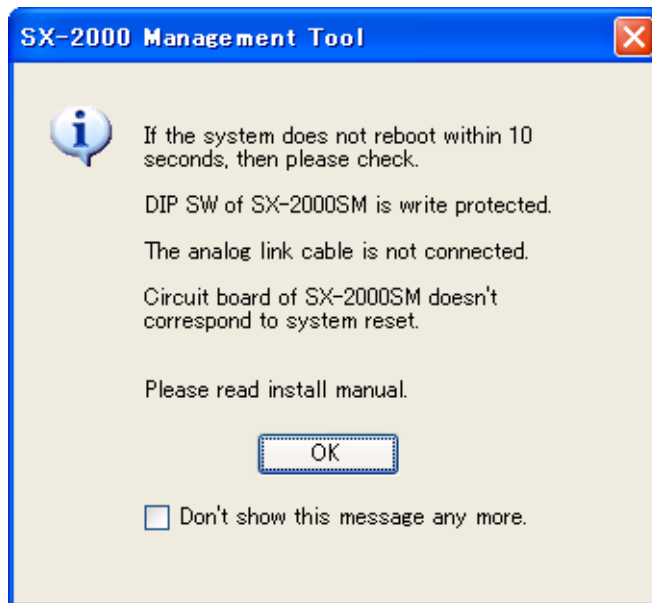


**Step 2.** Click the [Yes] button.

System reset begins.



The following screen is displayed.



**Step 3.** Click the [OK] button to close the dialog.

### [Checking to confirm if the system has been reset]

If the system has been reset, the fluorescent display on the front panel of the SX-2000AI, SX-2100AI, SX-2000AO and SX-2100AO goes off and then switches back on, causing the current broadcast to pause. The Standby indicator remains lit while the system is being reset and goes off after reset is completed.

### [When the system cannot be reset]

Check the following items:

**1) The SX-2000SM's Standby indicator remains lit.**

The internal circuitry of the SX-2000SM in use is not compatible with the system reset, disabling resets initiated by the setup software. Press the SX-2000SM's [Reset] key to reset the system. (For details, refer to the separate Installation Manual.)

**2) Analog link cables are not connected.**

To reset the entire system, connect all SX-2000SM, SX-2000AI, SX-2100AI and SX-2000AO units within the system in advance using their analog link connectors. Note that the unit not connected through analog link connectors is not reset. (For details, refer to the separate Installation Manual, "Analog Link Terminal Connections.")

**3) The SX-2000SM's DIP switch is set to "write protect."**

Set the DIP switch to the "System Reset ON" position.

(For details, refer to the separate Installation Manual, "System Reset enable/disable Settings (DIP Switch 3 Operation).")

After changing the DIP switch setting, press the [System reset] button again.

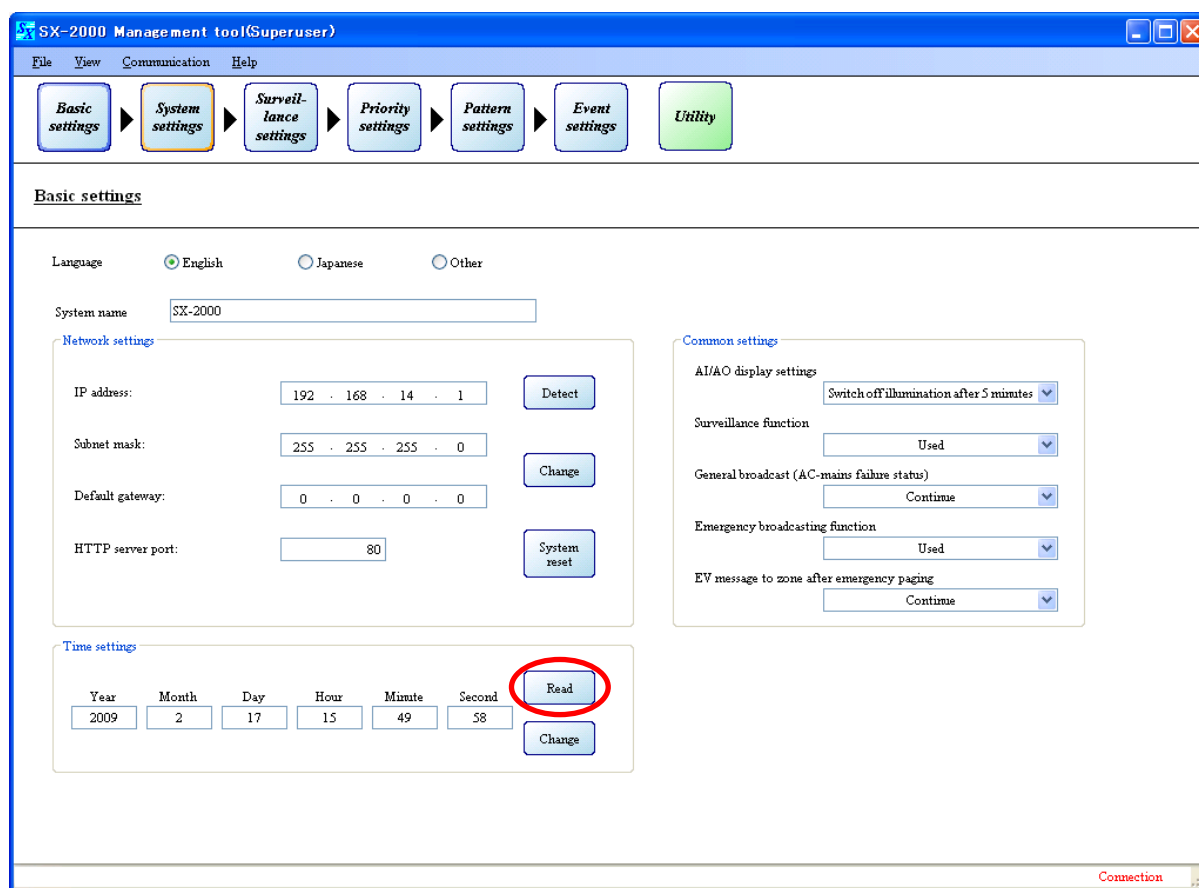
## 7.4. SX-2000SM Time Settings

Using the SX-2000 software, the SX-2000SM's current time setting can be confirmed online and changed.

**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to [p. 155 "Establishing Communications Between the SX-2000SM and a PC."](#)

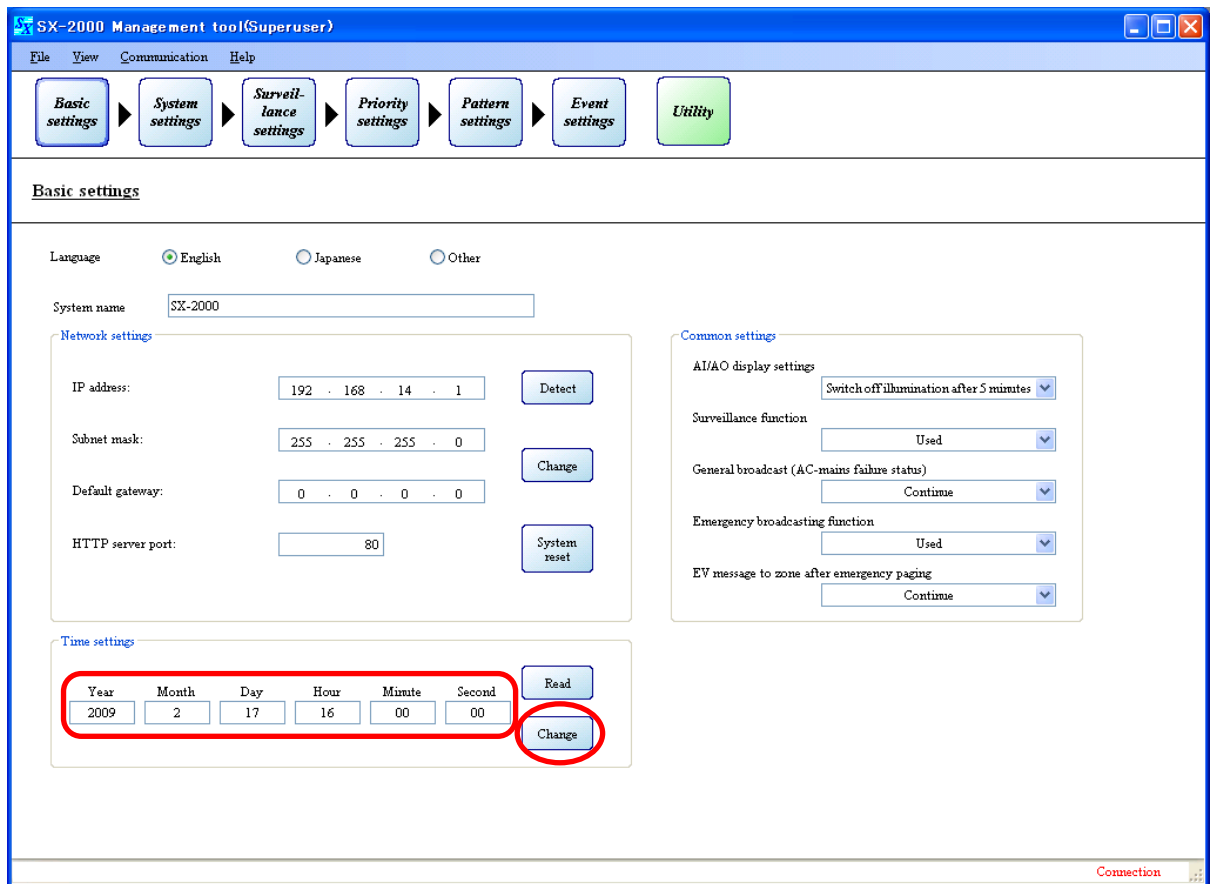
The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Click the [Read] button to display the time currently set for the SX-2000SM.



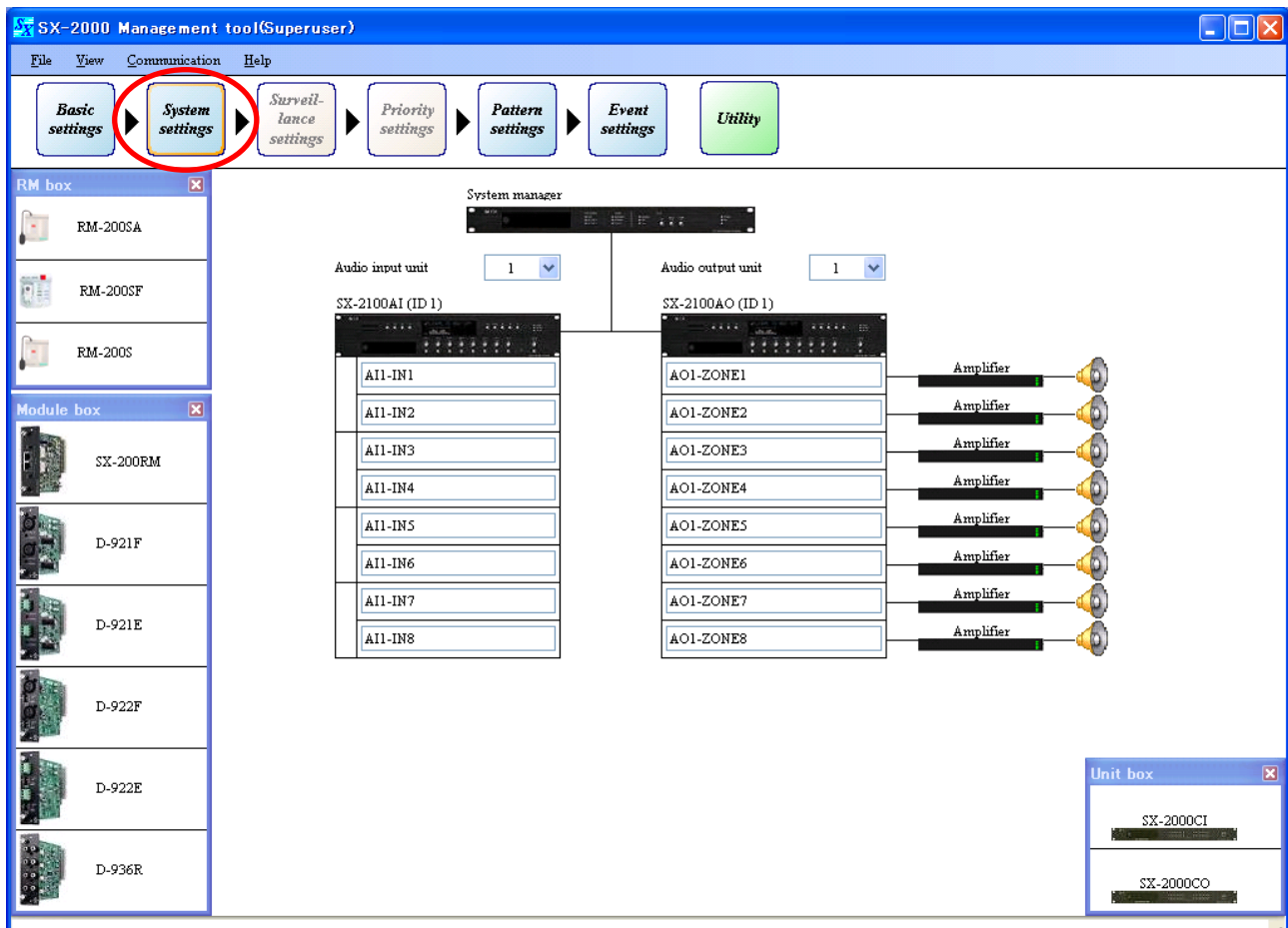
**Step 3.** When changing the date and time, enter new values in the boxes to be changed, then click the [Change] button.

The changed time is set to the SX-2000SM.



## 8. SYSTEM SETTINGS

Pressing the [System settings] button displays the screen below.

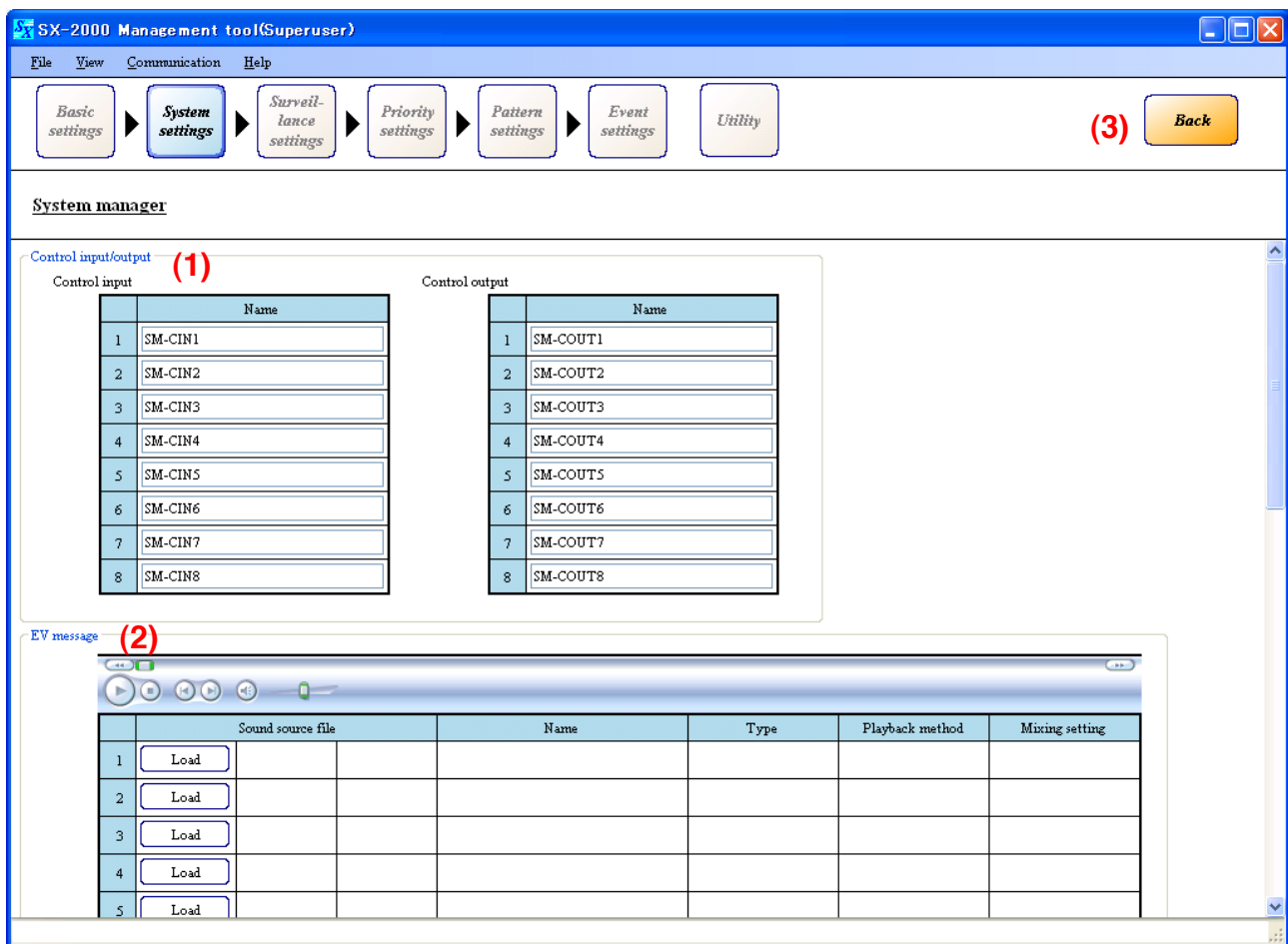
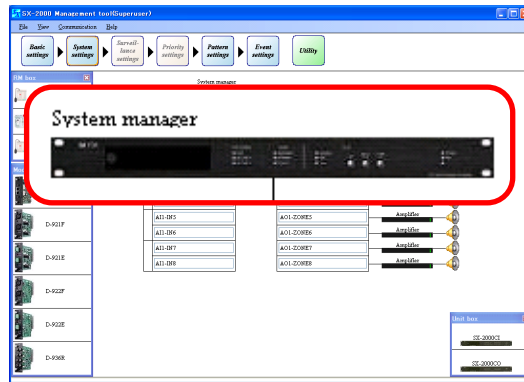


### Note

The system configuration data can be acquired online if the equipment has already been installed. (Refer to p. 161 "Acquiring System Configuration Data Online.")

## 8.1. SX-2000SM

Clicking on the [System manager] icon in the system settings screen displays the control input/output and EV message settings screen for the SX-2000SM.



### (1) Control input/output settings

Enter each name of the control inputs and outputs.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, SM-CIN1 represents the SX-2000SM's Control input No. 1, and SM-COUT1 represents the SX-2000SM's Control output No. 1.)
--------------------	--

### (2) EV message settings

Register and set the audio files.  
For details, refer to [pages 46 – 49](#).

### (3) Back button

Returns to the previous screen.

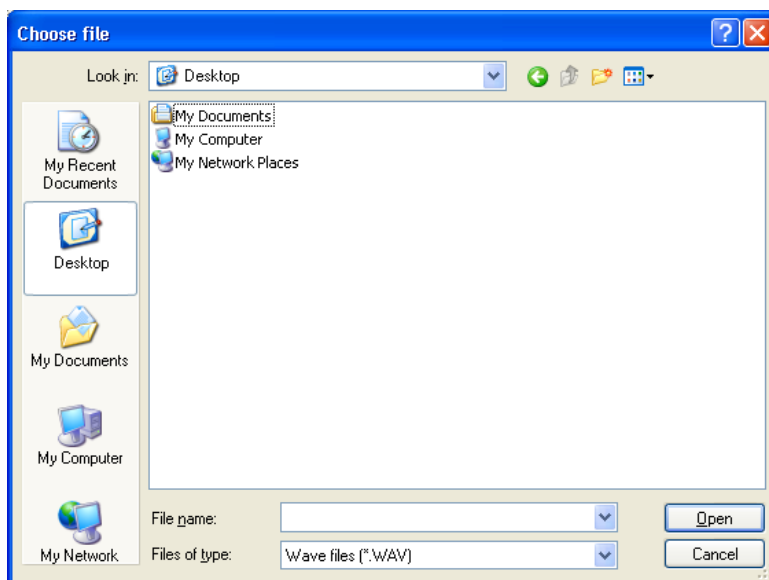
### 8.1.1. Registering sound sources

Only monaural sound sources of PCM 48 kHz in Wav format can be used for the EV messages. Create the sound source data separately and register them using the steps below.

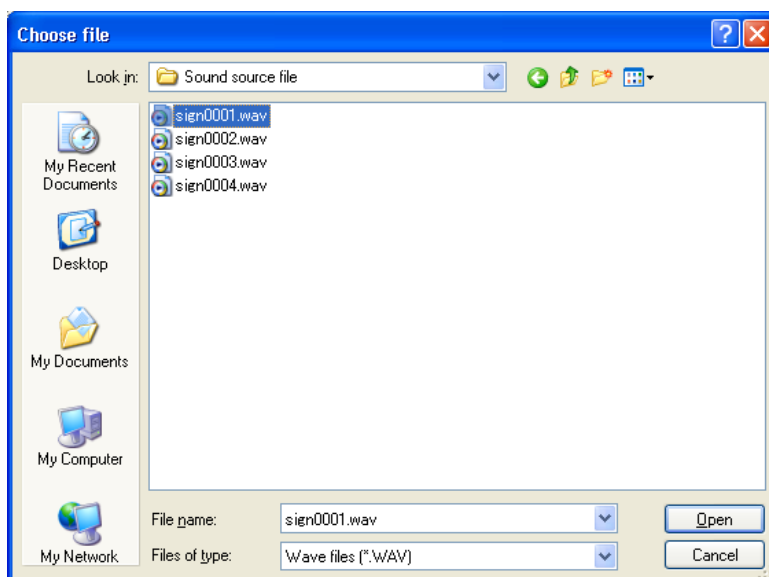
**Step 1.** Click the [Load] button to select the audio file to be used.

	Sound source file	Name	Type	Playback method	Mix
1	Load				
2	Load				
3	Load				

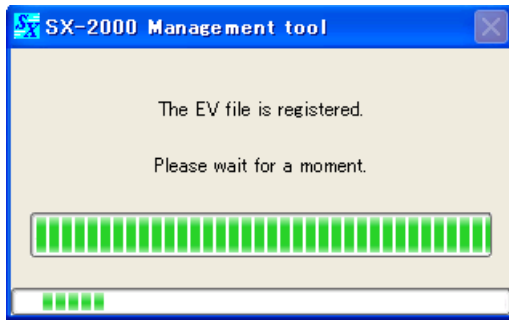
"Choose file" dialog is displayed.



**Step 2.** Designate the folder into which the sound sources have been saved. Then designate the desired audio file, and click the [Open] button.



This starts reading the audio file. The screen shown below is displayed during reading.

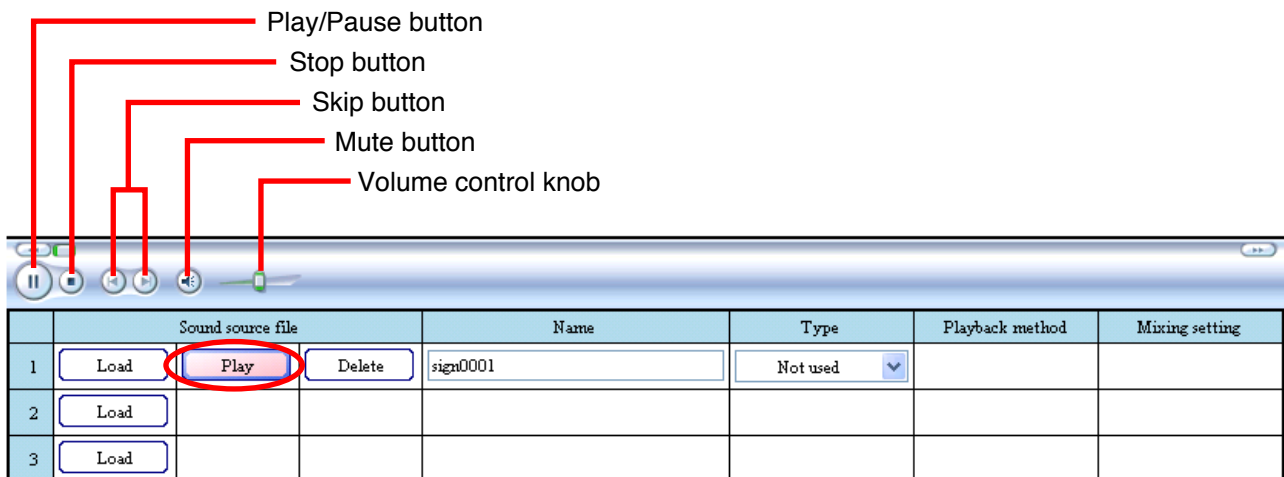


When the registration is finished, the EV message screen shown below is displayed.

	Sound source file			Name	Type	Playback method	Mixing setting
1	Load	Play	Delete	sign0001	Not used		
2	Load						
3	Load						

### 8.1.2. Listening the sound sources

Clicking the [Play] button for the registered sound source plays back the sound source. The operation buttons above the table become active during playback.

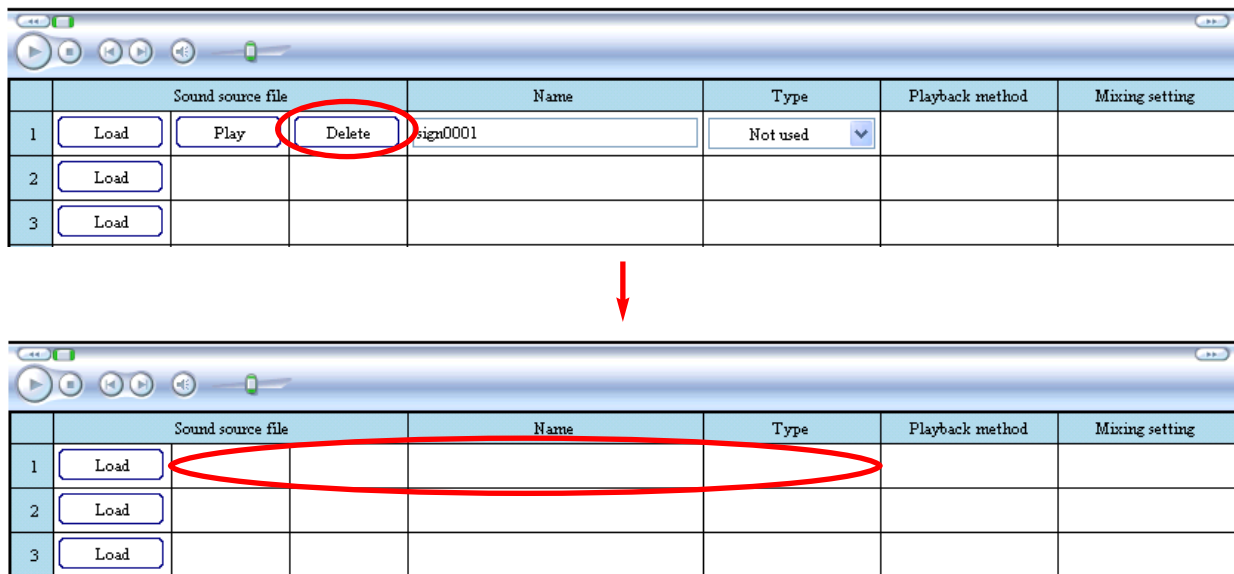


**Note**

Button display at the top of screen may differ depending on the Windows Media Player version installed in your PC.

### 8.1.3. Deleting the sound sources

Click the [Delete] button of the registered sound source.

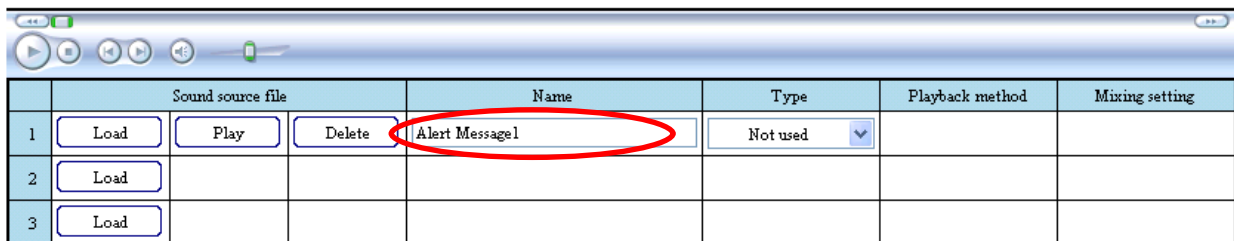


### 8.1.4. Renaming the sound sources

Change the name in the name field of the registered sound source.  
The file name of the registered sound source is assigned by default.

Available Settings	Up to 32 alphanumeric characters. (default: File name of the registered sound source)
--------------------	---

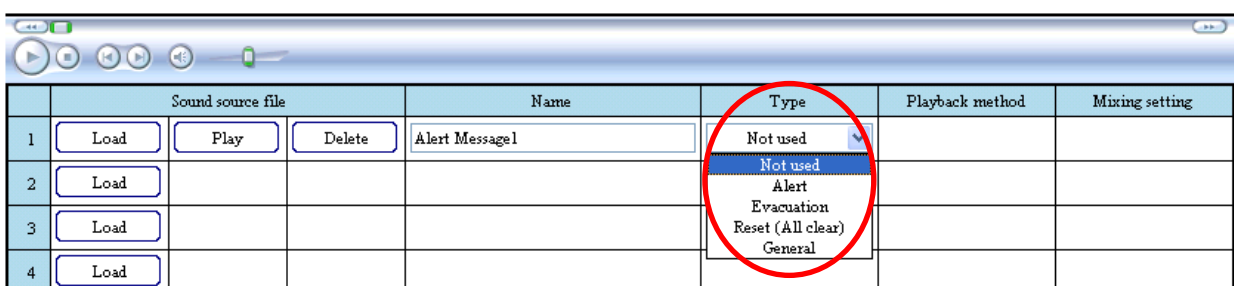
Name is changed to "Alert Message 1" in this example.



### 8.1.5. Setting the sound source types

Click the "Type" box to select the sound source type.  
The "Alert" and "Evacuation" messages are used in emergency situation, while the "Reset" message is used to notify that the emergency situation is over.  
The "General" EV message can be selected as the sound source in the General Broadcast Pattern Settings. (refer to p. 79)

Available Settings	Not used (default), Alert, Evacuation, Reset (All clear), General
--------------------	---

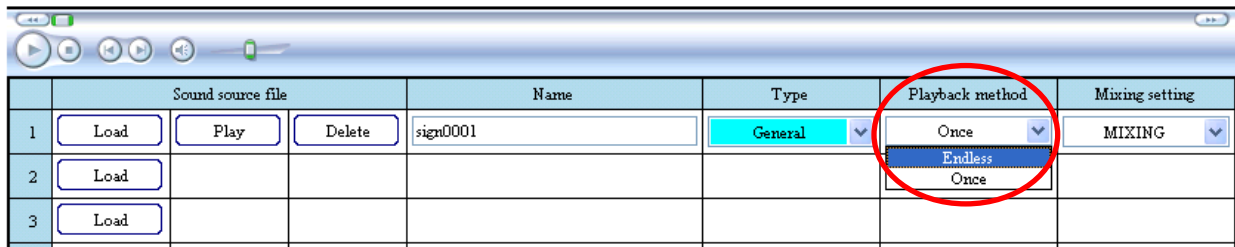




### 8.1.6. Playback method settings

Set the number of times that the EV message is repeated.  
The number of times can be selected when "Type" is set to "General."

Available Settings	Once (default), Endless
--------------------	-------------------------



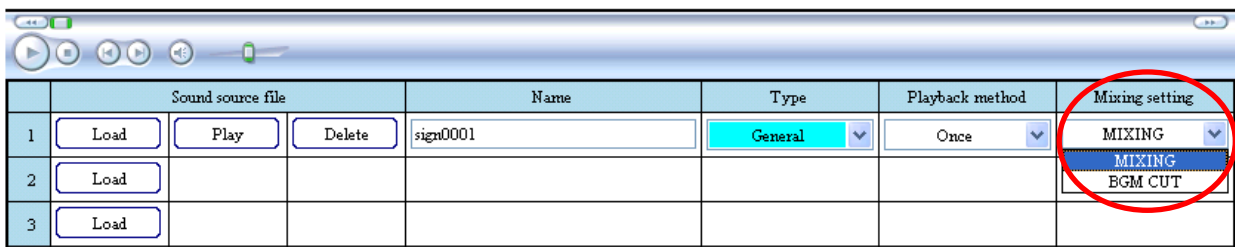
### 8.1.7. Mixing broadcast settings

Set whether or not to mix BGM output during EV message broadcasts.  
The mixing status can be selected when "Type" is set to "General."

Available Settings	MIXING (default), BGM CUT
--------------------	---------------------------

When "MIXING" is selected, the mixing setting ("MIXING" or "REDUCTION") for the SX-2000AI or SX-2100AI takes effect for BGM play in all zones where the EV message is broadcast. (Refer to p. 53, "SX-2000AI and SX-2100AI → Audio input details settings → Module detail settings.")

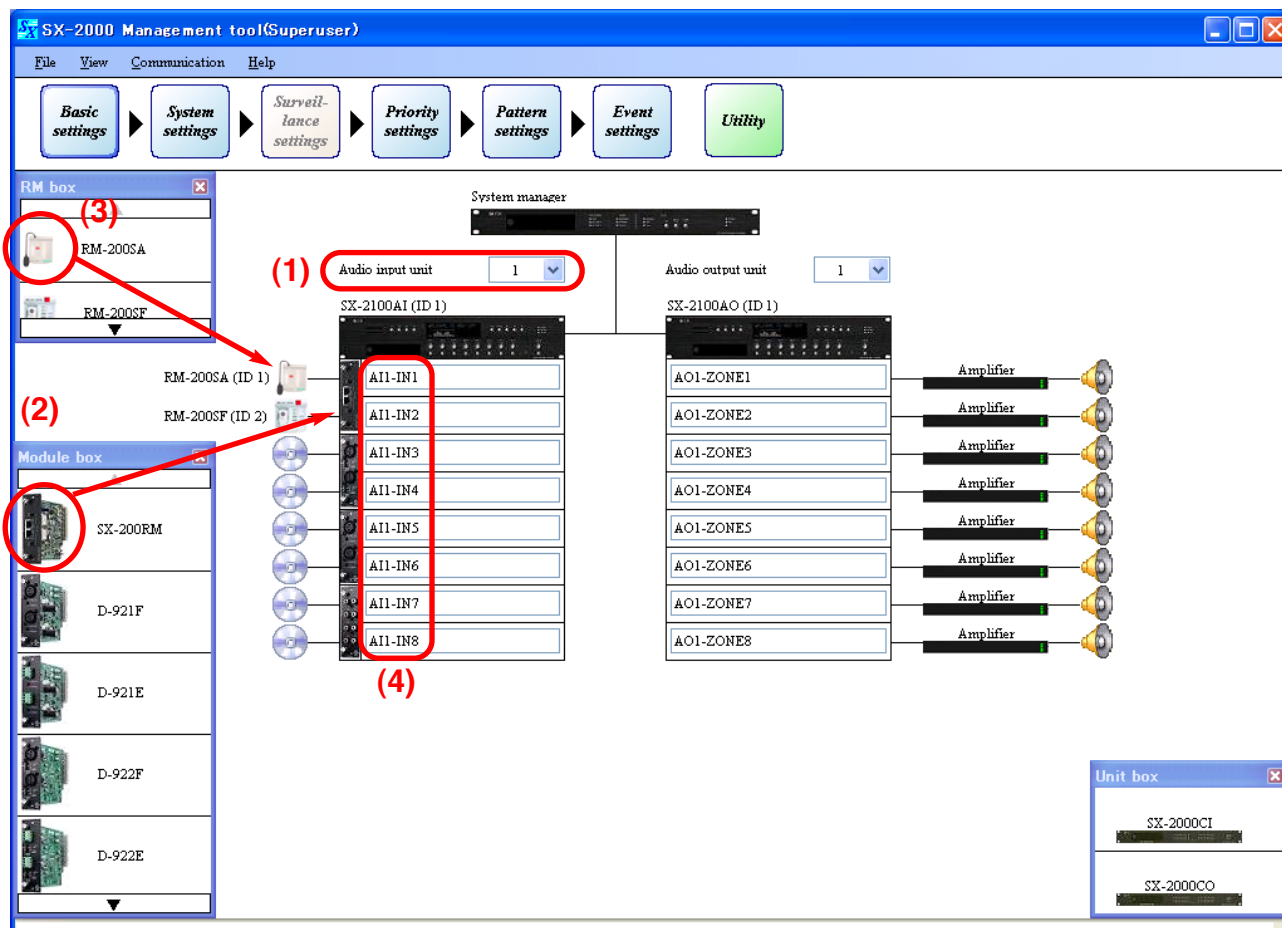
Selecting "BGM CUT" cuts off BGM play in all zones where the EV message is broadcast, regardless of the mixing settings of the SX-2000AI or SX-2100AI.



## 8.2. SX-2000AI and SX-2100AI

### 8.2.1. Audio input settings

Set the number of SX-2000AI and SX-2100AI units, and the model numbers of built-in modules and connected remote microphones.



#### (1) Number of audio input units

Select the number of SX-2000AI and SX-2100AI units being used.

Available Settings	1 – 8 (default: 1)
--------------------	--------------------

#### (2) Module

Drag and drop the icon of module to use from the Module box onto the SX-2000AI's or SX-2100AI's slot. To delete the set module, right-click on its icon and select "Delete" from the pop-up menu.

Available Settings	None (default), SX-200RM, D-921F, D-921E, D-922F, D-922E, D-936R
--------------------	--

#### (3) Remote microphone

This setting is valid when the SX-200RM module has been set.

Drag and drop the icon of remote microphone to use from the RM box onto the SX-200RM.

To delete the set remote microphone, right-click on its icon and select "Delete" from the pop-up menu.

Available Settings	None (default), RM-200SA, RM-200SF, RM-200S
--------------------	---

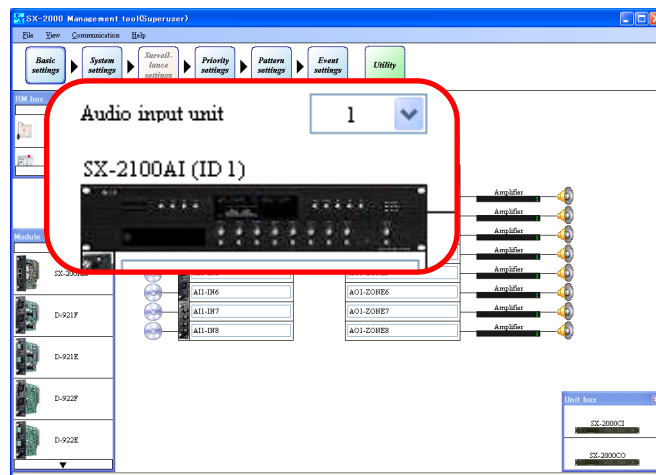
#### (4) Input channel name

Enter each name of the input channels.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AI1-IN1 represents the SX-2000AI's or SX-2100AI's Input channel No. 1.)
--------------------	---

#### 8.2.2. Audio input detail settings

Clicking on the [SX-2000AI] or [SX-2100AI] icon in the settings screen displays the screen for model number selection, module detail settings, key name settings, and control input/output name settings (SX-2100AI only).



To the next page

From the previous page



**(1) Type**

Select the model number of the Audio input unit.

Available Settings	SX-2000AI, SX-2100AI (default)
--------------------	--------------------------------

**(2) Unit number**

Click on the box, or press the right arrow button (increment) or left arrow button (decrement) to select the unit ID number.

Available Settings	Numerals ranging from 1 to the number of the audio input units set on <a href="#">the previous page</a> . (default: 1)
--------------------	--

### (3) Module detail settings

#### • Type

Select the type of broadcast.

This selection becomes available when "Module" (p. 50) is set to the model number other than "SX-200RM."

When "Module" is set to the SX-200RM, the type of remote microphone connected to the SX-200RM is displayed.

These types differ depending on the remote microphone models as follows: "General" (fixed) for RM-200S, "Emergency" (fixed) for RM-200SF, and the type determined in the System Settings (p. 59) for RM-200SA.

Available Settings	General (default), BGM, Emergency/General, Emergency
--------------------	--

#### • Volume (dB)

Select the sound volume levels for the audio input sources.

Available Settings	0 (default), -1 to -69, -infinity (in 1-dB steps)
--------------------	---

#### • Mixing Setting

This function is used for mixing settings for BGM and General broadcasts.

Mixing status can be selected when "Type" is set to "General" or "BGM."

(1) When "Type" is set to "General"

Available Settings	MIXING (default), BGM CUT
--------------------	---------------------------

"MIXING": Mixes General and BGM broadcasts.

"BGM CUT": Cuts off BGM play in all General broadcast zones, regardless of the BGM side settings.

(2) When "Type" is set to "BGM"

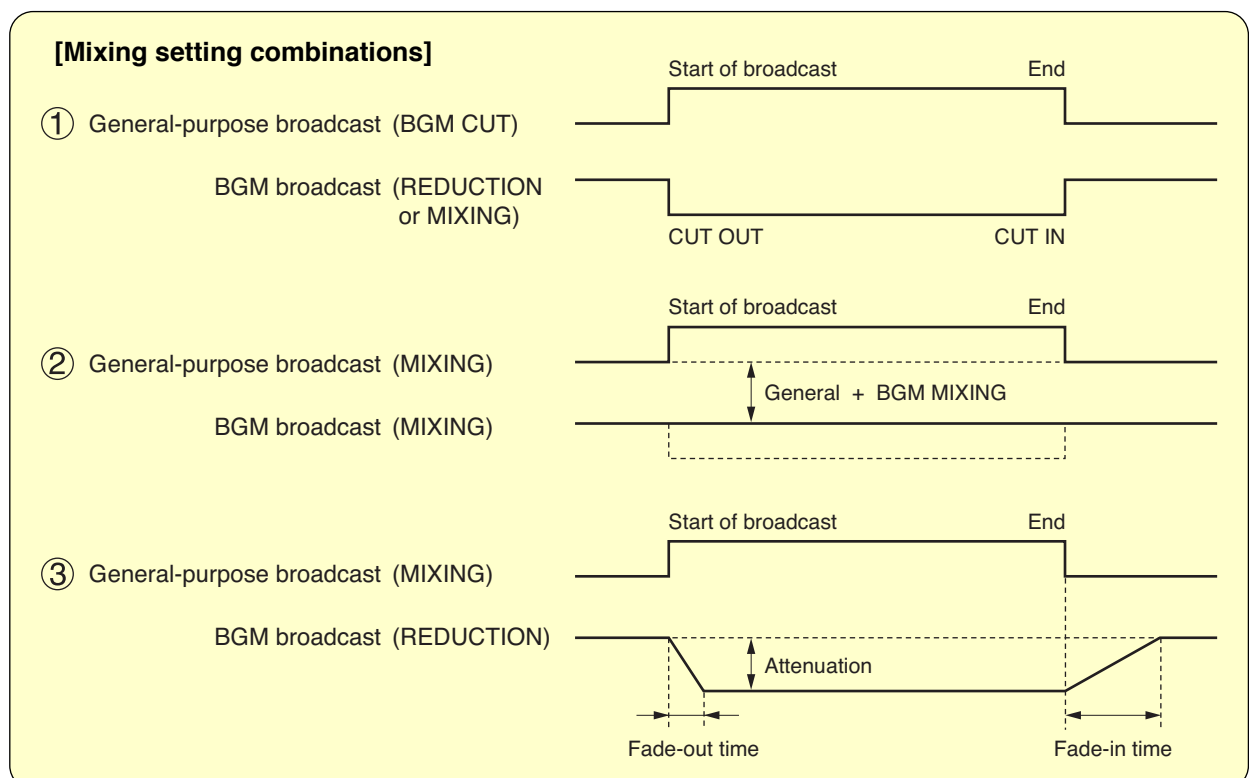
Available Settings	REDUCTION (default), MIXING
--------------------	-----------------------------

Set mixing status when the General broadcast MIXING setting is set to MIXING.

"REDUCTION": BGM play in general broadcast zones fades out to the preprogrammed attenuation and time, and both the general broadcast and BGM output are mixed.

"MIXING": General broadcast and BGM output are mixed. The BGM volume does not vary during general broadcast.

**Note:** When "Type" is set to "Emergency/General," BGM play is automatically cut off.



• **Fade out (sec)**

This selection becomes available when "Mixing setting" is set to "REDUCTION."

Available Settings	0 – 6 (default: 1), in 1-sec steps
--------------------	------------------------------------

• **Fade in (sec)**

This selection becomes available when "Mixing setting" is set to "REDUCTION."

Available Settings	0 – 6 (default: 4), in 1-sec steps
--------------------	------------------------------------

• **Attenuation (dB)**

This selection becomes available when "Mixing setting" is set to "REDUCTION."

Available Settings	–1 to – 40 (default: – 40) (in 1-dB steps)
--------------------	--

• **PAD**

Select the PAD (input sensitivity). This setting is available only when "Module" (p. 50) is set to "D-921F" or "D-921E."

Available Settings	LINE +4 dB (default), LINE –10 dB, MIC –36 dB, MIC –50 dB
--------------------	---

• **Phantom power**

Select whether or not to use the phantom power supply. This setting is available when "Module" (p. 50) is set to "D-921F" or "D-921E," and "PAD (input sensitivity)" is set to either "MIC –36 dB" or "MIC –50 dB."

Available Settings	OFF (don't use phantom power supply, default), ON (use phantom power supply)
--------------------	--

**(4) Key name**

Enter each name of the function keys and channel keys on the SX-2000AI's and SX-2100AI's front panel.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AI1-FKEY1 represents the SX-2000AI's or SX-2100AI's Function key No. 1, and AI1-CHKEY1 represents the SX-2000AI's or SX-2100AI's Channel key No. 1.)
--------------------	--

**(5) Control input/output (SX-2100AI only)**

Enter each name of the control inputs and control outputs of the SX-2100AI.

This selection becomes available when "Type" (p. 52) is set to "SX-2100AI."

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AI1-CIN1 represents the SX-2100AI's Control Input No. 1, and AI1-COUT1 represents the SX-2100AI's Control output No 1.)
--------------------	---

**(6) Copy and Paste buttons**

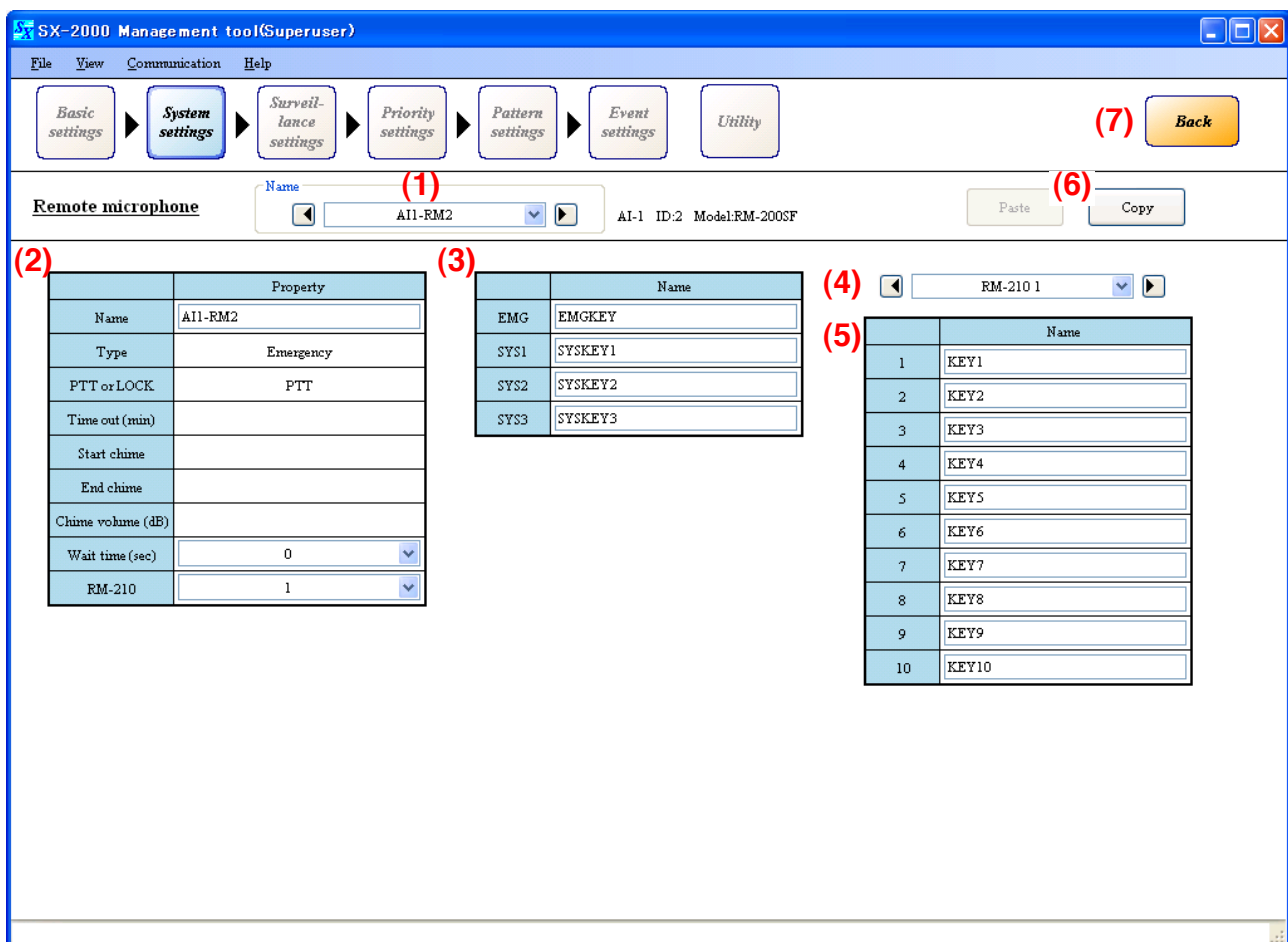
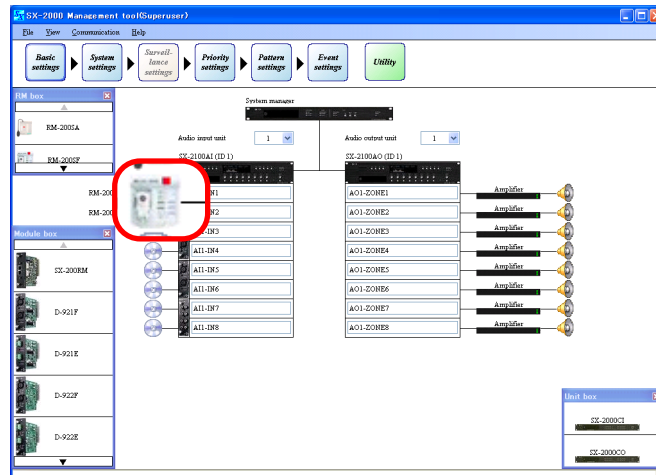
Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000AI or SX-2100AI selected by Unit number setting item (2).

**(7) Back button**

Returns to the previous screen.

### 8.3. RM-200SF

Make basic configurations for the RM-200SF Fireman's Microphone.  
Clicking on the [RM-200SF] icon in the system settings screen displays the detail settings screen.



#### (1) Name

Click on the box, or press the right or left arrow button to select the target RM-200SF.  
Default name, for example, A11-RM2 represents the RM-200SF of Unit No. 2 connected to the SX-2000AI or SX-2100AI of Unit No. 1.

## (2) Function settings

### • Name

Enter a name of the RM-200SF.

Available Settings	Up to 32 alphanumeric characters. (Default name is the same as that in the Name (1) on the previous page.)
--------------------	--

### • Type

The type of broadcast is fixed to "Emergency," and cannot be changed.

### • PTT or Lock

The microphone's talk key operation method is fixed to "PTT\*," and cannot be changed.

\* PTT: Enables microphone announcements to be made while the Talk key is being pressed.

### Note

The setting items of "Time out," "Start chime," "End time," and "Chime volume" cannot be set.

### • Wait time (sec)

Set the time required to start the microphone announcement after the RM-200SF's talk key has been pressed. Select the time according to the start-up time of connected power amplifiers or line selection relays.

Available Settings	0 (default), 0.5, 1.0, 1.5, 2.0, 3.0, 4.0
--------------------	---

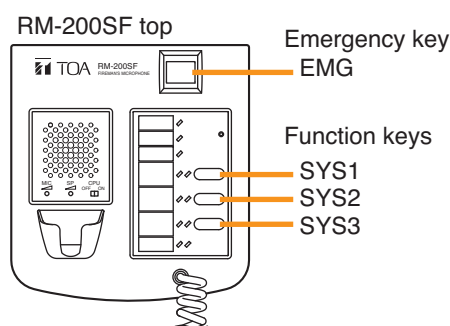
### • RM-210

Select the number of RM-210 units being used.

Available Settings	0 (default), 1 – 5
--------------------	--------------------

## (3) Key names

Enter each name of the Emergency key and function keys on the RM-200SF's top panel.



Available Settings	Up to 32 alphanumeric characters. (default: EMGKEY, SYSKEY 1 – 3)
--------------------	---

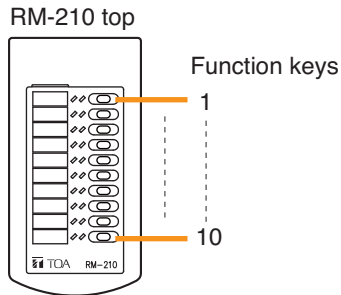
## (4) RM-210 selection

This setting is valid when the "RM-210" has been set to 1 to 5 in the Function settings (2). Click on the box, or press the right or left arrow button to select the target RM-210.



### (5) Function key names

Enter each name of the function keys on the RM-210's top panel.



Available Settings	Up to 32 alphanumeric characters. (default: KEY 1 – 50)
--------------------	---

### (6) Copy and Paste buttons

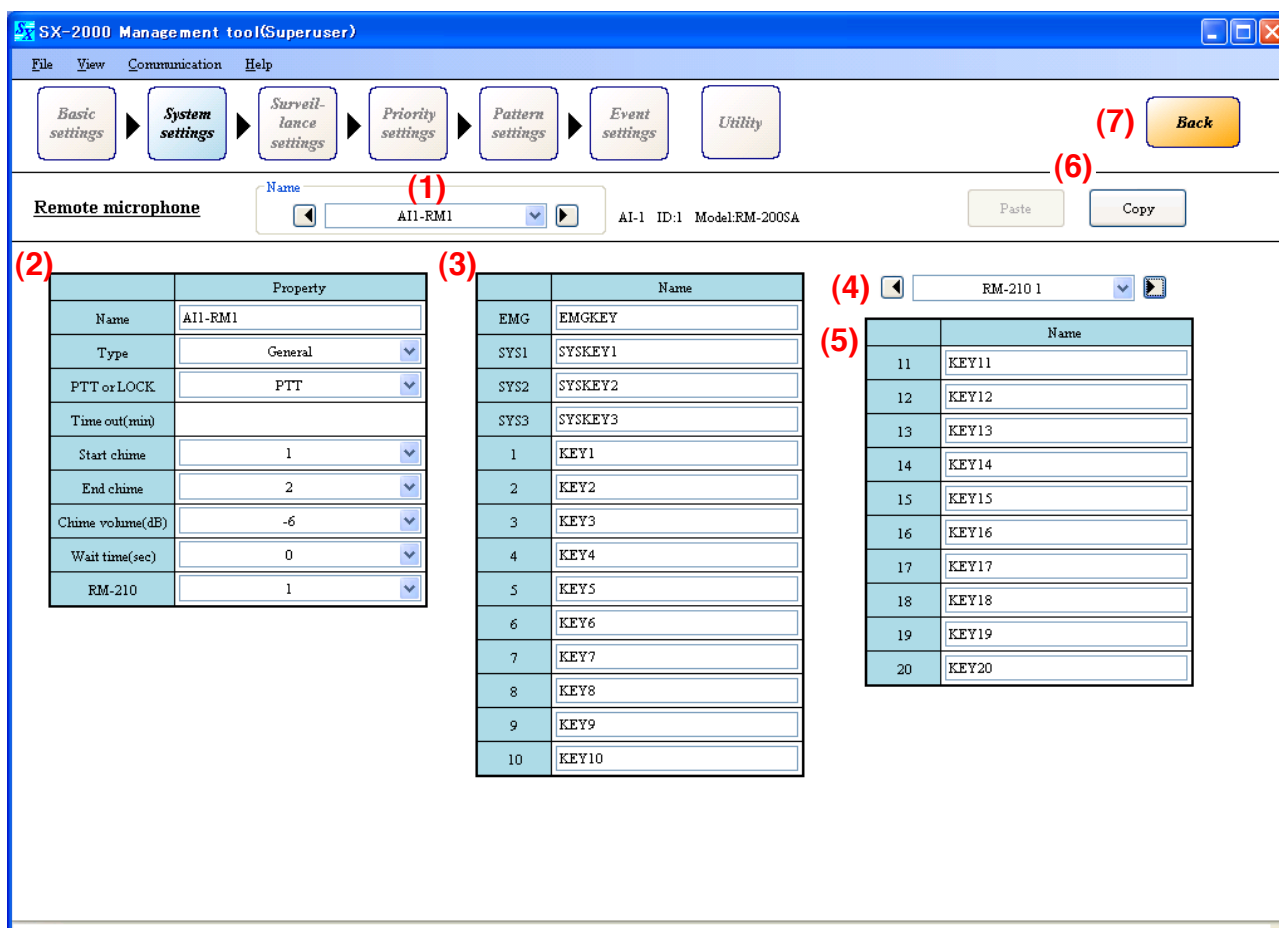
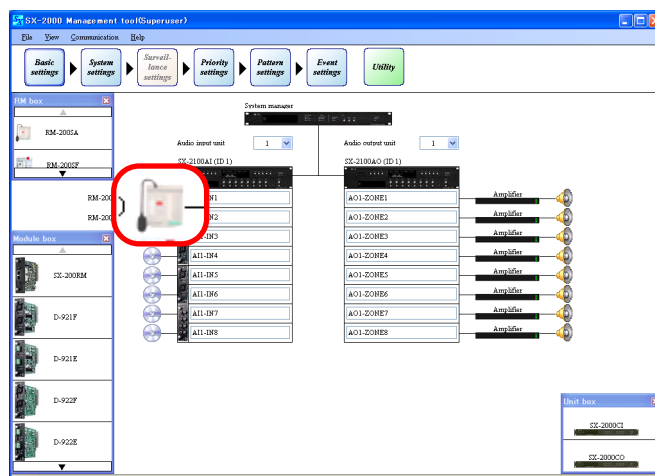
Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other RM-200SF selected by Name (1).

### (7) Back button

Returns to the previous screen.

## 8.4. RM-200S, RM-200SA

Make basic configurations for the RM-200S and RM-200SA Remote Microphones. Clicking on the [RM-200S] or [RM-200SA] in the system setting screen displays the detail settings screen.



### (1) Name

Click on the box, or press the right or left arrow button to select the target RM-200S or RM-200SA. Default name, for example, AI1-RM1 represents the RM-200S or RM-200SA of Unit No. 1 connected to the SX-2000AI or SX-2100AI of Unit No. 1.

## (2) Function settings

### • Name

Enter a name of the RM-200S or RM-200SA.

Available Settings	Up to 32 alphanumeric characters. (Default name is the same as that in the Name (1) on the previous page.
--------------------	---

### • Type

Select the type of broadcast.

Available Settings	General (default), Emergency/General
--------------------	--------------------------------------

**Note:** The type for the RM-200S is fixed to "General."

### • PTT or Lock

Select the RM-200S's or RM-200SA's "Talk key" operation method.

Available Settings	PTT (default), Lock
--------------------	---------------------

#### [PTT and Lock]

Two different methods are available for Talk key operation: Press-to-Talk (PTT) and Lock modes.

**PTT:** Enables microphone announcements to be made while the Talk key is being pressed.

**Lock:** Enables microphone announcements by pressing the Talk key once and terminates by pressing it again.

### • Time out (min)

The time-out period can be set when the "Talk" key operation method has been set to "Lock" mode.

Select an appropriate time-out period after which Remote Microphone announcements are automatically terminated if the user fails to turn off the microphone power.

Available Settings	Continuous (default), 1 – 20 (minutes)
--------------------	--

### • Start chime

Select the type of chime tone to be sounded before Remote Microphone announcements are made.

Available Settings	None (default), 1 (Chime 1), 2 (Chime 2), 3 (Chime 3), 4 (Chime 4) <b>Tip:</b> The system chime is set to: 1 (ascending 4-note tone), 2 (descending 4-note tone), 3 (2-tone chime), 4 (gong)
--------------------	---

### • End chime

Select the type of chime tone to be sounded after Remote Microphone announcements have been completed.

Available Settings	None (default), 1 (Chime 1), 2 (Chime 2), 3 (Chime 3), 4 (Chime 4) <b>Tip:</b> The system chime is set to: 1 (ascending 4-note tone), 2 (descending 4-note tone), 3 (2-tone chime), 4 (gong)
--------------------	---

### • Chime volume (dB)

Select the volume of the chime broadcast by the Remote Microphone.

Available Settings	0 to –20 dB (default: –6 dB), in 2-dB steps
--------------------	---

• **Wait time (sec)**

Set the time required to start broadcast\* after the talk key on the remote microphone has been pressed. Select the time according to the start-up time of connected power amplifiers or line selection relays.

\* When "None" is selected in the Start chime setting, wait time means time duration before the microphone announcement starts, while when the value other than "None" is selected, it means the time duration before the chime sounds.

Available Settings	0 (default), 0.5, 1.0, 1.5, 2.0, 3.0, 4.0
--------------------	---

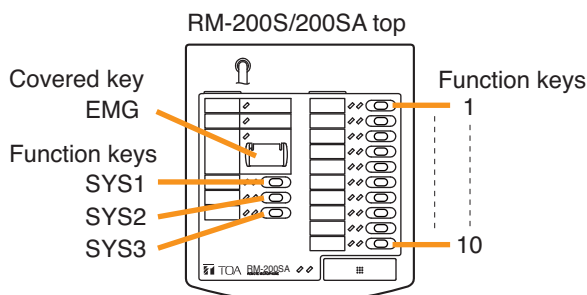
• **RM-210**

Select the number of RM-210 Remote Microphone Expansion units.

Available Settings	0 (default), 1 – 4
--------------------	--------------------

**(3) Key names**

Enter each name of the Covered key and function keys on the RM-200S's or RM-200SA's top panel.



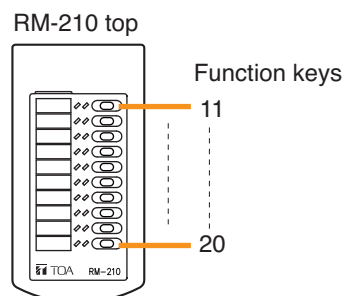
Available Settings	Up to 32 alphanumeric characters. (default: EMGKEY for the Covered key, SYSKEY 1 – 3 for the Function keys (on the left), and KEY 1 – 10 for the Function keys (on the right))
--------------------	--

**(4) RM-210 selection**

This setting is valid when the "RM-210" has been set to 1 to 4 in the Function settings (2). Click on the box, or press the right or left arrow button to select the target RM-210.

**(5) Function key names**

Enter each name of the function keys on the RM-210's top panel.



Available Settings	Up to 32 alphanumeric characters. (default: KEY 11 – 50)
--------------------	--

**(6) Copy and Paste buttons**

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other RM-200S or RM-200SA selected by Name (1).

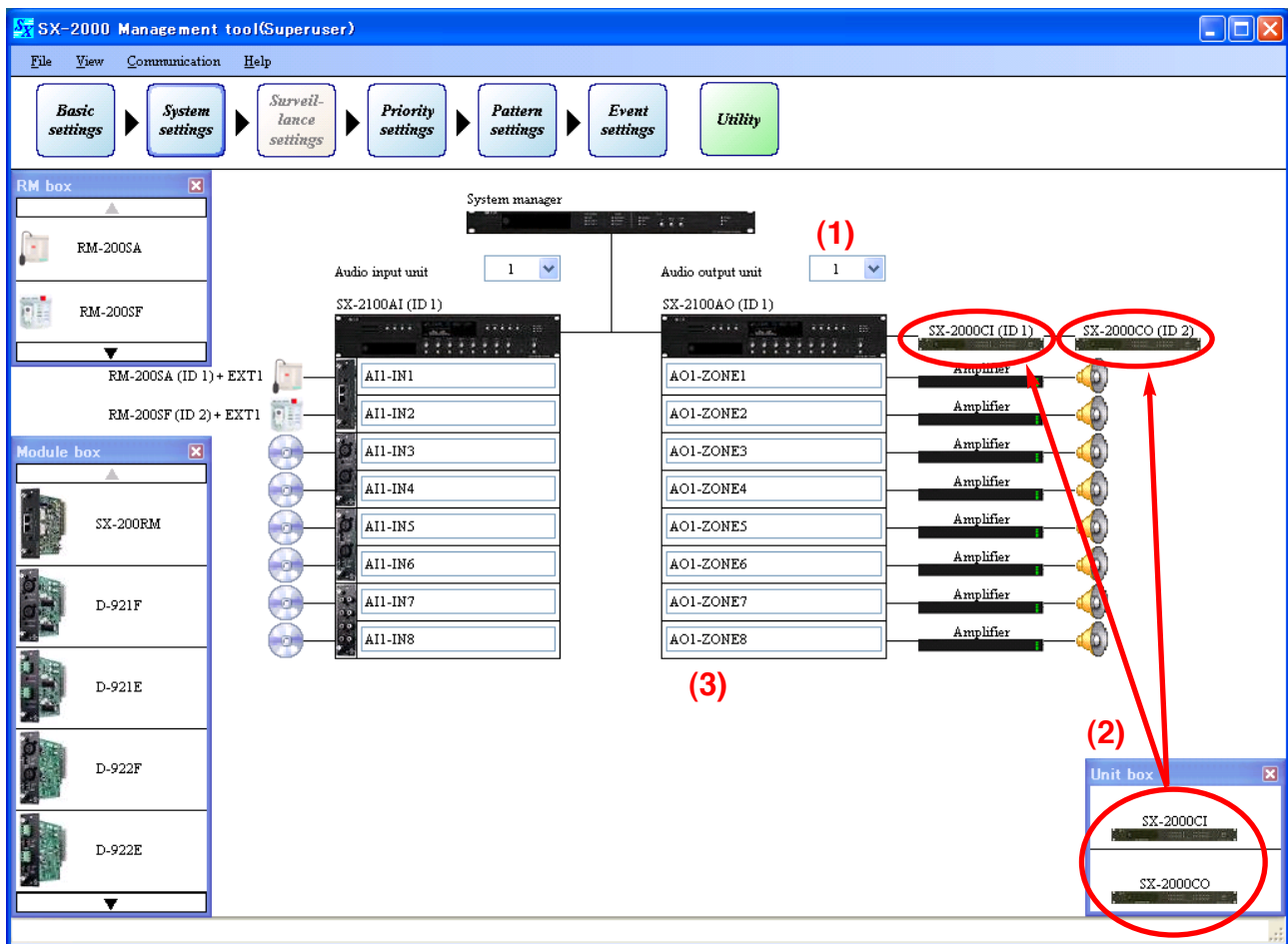
**(7) Back button**

Returns to the previous screen.

## 8.5. SX-2000AO and SX-2100AO

### 8.5.1. Audio output settings

Set the number of SX-2000AO or SX-2100AO units, and whether the SX-2000CI and/or SX-2000CO is connected.



#### (1) Number of audio output units

Select the number of SX-2000AO and SX-2100AO units being used.

Available Settings	1 – 32 (default: 1)
--------------------	---------------------

#### (2) Control input/output unit

One each of SX-2000CI and SX-2000CO can be cascade-connected to the SX-2000AO or SX-2100AO. Drag and drop the icon of SX-2000CI or SX-2000CO to use from the Unit box. To delete the set unit, right-click on its icon and select "Delete" from the pop-up menu.

Available Settings	None (default), SX-2000CI, SX-2000CO
--------------------	--------------------------------------

#### (3) Output channel name

Enter each name of the output channels.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-ZONE1 represents the SX-2000AO's Output channel No. 1 or SX-2100AO's Zone 1 output.)
--------------------	--

## 8.5.2. Audio output detail settings

Clicking on the [SX-2000AO] or [SX-2100AO] icon in the settings screen displays the screens for model number selection, output zone settings, key name settings, and control input/output name settings, standby amplifier settings (SX-2100AO only) and local input settings (SX-2100AO only).

**(1) Type**

Audio output unit 1 (1) Type:  SX-2000AO  SX-2100AO

**(2) Unit number**

Unit number (2): 1

**(3) Audio output unit**

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
Name	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
Volume(dB)	0	0	0	0	0	0	0	0
BGM offset(dB)	0	0	0	0	0	0	0	0
Amplifier	VP-2064	VP-2064	VP-2064	VP-2064	VP-2064	VP-2064	VP-2064	VP-2064
SP line voltage	100V	100V	100V	100V	100V	100V	100V	100V
Attenuator	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
EOL	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used

**(4) Key name**

Function key

	Name
1	AO1-FKEY1
2	AO1-FKEY2
3	AO1-FKEY3
4	AO1-FKEY4

Channel key

	Name
1	AO1-CHKEY1
2	AO1-CHKEY2
3	AO1-CHKEY3
4	AO1-CHKEY4
5	AO1-CHKEY5
6	AO1-CHKEY6
7	AO1-CHKEY7
8	AO1-CHKEY8

**(5) Control input/output**

Control input

	Name
1	AO1-CIN1
2	AO1-CIN2
3	AO1-CIN3
4	AO1-CIN4
5	AO1-CIN5
6	AO1-CIN6
7	AO1-CIN7
8	AO1-CIN8

Control output

	Name
1	AO1-COUT1
2	AO1-COUT2
3	AO1-COUT3
4	AO1-COUT4
5	AO1-COUT5
6	AO1-COUT6
7	AO1-COUT7
8	AO1-COUT8

**(6) Standby amplifier**

Amplifier	SP line voltage
VP-2064	100V

**(7) Local input**

	Local input1	Local input2
Name	AO1-LocalIn1	AO1-LocalIn2
Volume(dB)	0	0

**(8) Back**

### (1) Type

Select the model number of the Audio output unit to use.

Available Settings	SX-2000AO, SX-2100AO (default)
--------------------	--------------------------------

### (2) Unit number

Click on the box, or press the right arrow button (increment) or left arrow button (decrement) to select the unit ID number.

Available Settings	Numerals ranging from 1 to the number of the audio output units set on <a href="#">the previous page</a> . (default: 1)
--------------------	---

### (3) Output zone settings

- "Name" is fixed, and cannot be edited.

- **Volume (dB)**

Select the sound volume levels for the output zones.

Available Settings	0 (default), -1 to -69, -infinity (in 1-dB steps)
--------------------	---

- **BGM offset (dB)**

Select the attenuated level of BGM sound during General-purpose broadcast.

Available Settings	0 (default), -1 to -69, -infinity (in 1-dB steps)
--------------------	---

**Note**

Shown above is the setting range when the volume is set to the default value (0 dB). This BGM offset range varies with the set volume value. For example, when the volume is set to "-10 dB," the BGM offset range becomes from 0 to -60 dB.

- **Amplifier**

When "Type" is set to SX-2000AO, select whether the amplifier is used or not. Similarly for SX-2100AO, select the amplifier model to use or "Not used."

Available Settings	SX-2000AO: Used (default), Not used SX-2100AO: VP-2064 (default), VP-2122, VP-2241, VP-2421, Not used
--------------------	--

**Note:** To set the VP-3000 series amplifiers, select VP-2122 for VP-3154, VP-2241 for VP-3304, and VP-2421 for VP-3504 since these models do not appear on the pull-down menu.

- **SP line voltage (SX-2100AO only)**

Select the speaker line voltage.

Available Settings	100 V (default), 70 V, 50 V
--------------------	-----------------------------

**Note**

The speaker line voltage selected here must be matched with that of the VP-2000 series or VP-3000 series Amplifier.

If not matched, change the amplifier's speaker line voltage referring to the separate Installation Manual.

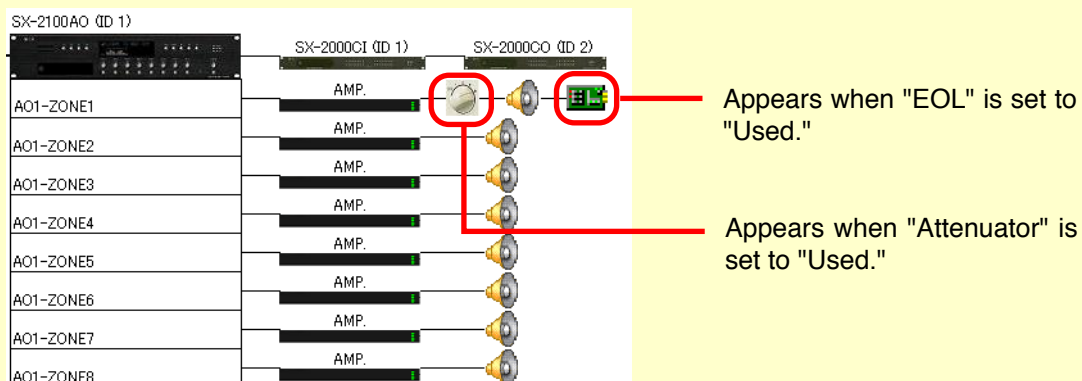
- **Attenuator (SX-2100AO only)**

Select whether or not to use attenuator(s).

Available Settings	Not used (default), Used
--------------------	--------------------------

When an emergency broadcast is set to "Used," the control output of the channel that is the same as the number of zone for which "Attenuator" is set to "Used" is activated in emergency broadcast state. Use this control output to bypass the external attenuators in the emergency state. See the separate Installation Manual, "Connecting the SX-2100AO to external attenuators."

When "Attenuator" or "EOL" is set to "Used," the unit configuration is displayed on the screen as shown below.



• **EOL (SX-2100AO only)**

Set this item when the EOL (End-of-Line) unit is used.  
This must be made valid in the speaker line failure detection settings.

Available Settings	Not used (default), Used
--------------------	--------------------------

• **Pilot tone (20 kHz) (SX-2000AO only)**

Set whether or not a pilot tone is used.

**Note**

"Surveillance function setting" of "Basic Settings" (p. 30) and "Amplifier" of "Output zone settings" (p. 63) must both be set to "Used."

Available Settings	Not used (default), Used
--------------------	--------------------------

**(4) Key name**

Enter each name of the function keys and channel keys on the SX-2000AO's and SX-2100AO's front panel.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-FKEY1 represents the SX-2000AO's or SX-2100AO's Function key "F1," and AO1-CHKEY1 represents the SX-2000AO's or SX-2100AO's Channel key 1.)
--------------------	---

**(5) Control input/output**

Enter each name of the control inputs and control outputs of the SX-2000AO and SX-2100AO.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-CIN1 represents the SX-2000AO's or SX-2100AO's Control input 1, and AO1-COUT1 represents the SX-2000AO's or SX-2100AO's Control output No. 1.)
--------------------	--

**(6) Standby amplifier (SX-2100AO only)**

This function is available only when the "Surveillance function" is set to "Used" in the "Basic Settings."

• **Amplifier**

Select the amplifier model number to use, or "Not used."

Available Settings	VP-2064 (default), VP-2122, VP-2241, VP-2421, Not used
--------------------	--

**Note:** To set the VP-3000 series amplifiers, select VP-2122 for VP-3154, VP-2241 for VP-3304, and VP-2421 for VP-3504 since these models do not appear on the pull-down menu.

• **SP line voltage**

This setting is valid when the Amplifier model item above has not been set to "Not used."  
Select the speaker line voltage.

Available Settings	100 V (default), 70 V, 50 V
--------------------	-----------------------------

**(7) Local input (SX-2100AO only)**

• **Name**

Enter the names of the Local inputs 1 and 2.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-Local In 1 represents the SX-2100AO's Local input 1.)
--------------------	---

• **Volume (dB)**

Select the sound volume levels for the output zones.

Available Settings	0 (default), -1 to -69, -infinity (in 1-dB steps)
--------------------	---



### (8) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000AO or SX-2100AO selected by Unit number setting item (2).

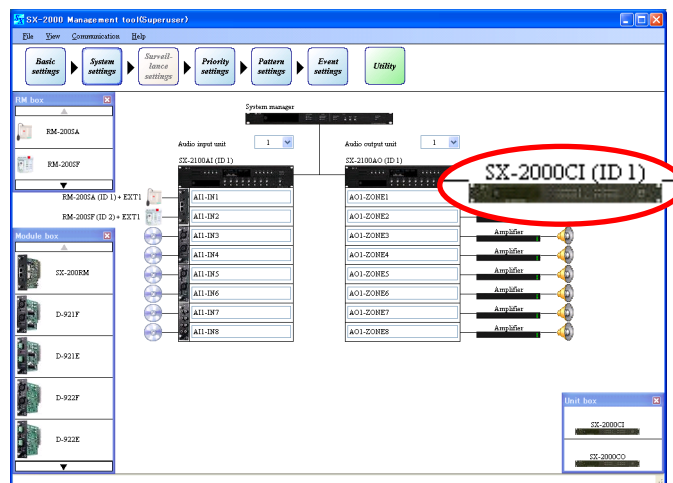
### (9) Back button

Returns to the previous screen.

## 8.6. SX-2000CI

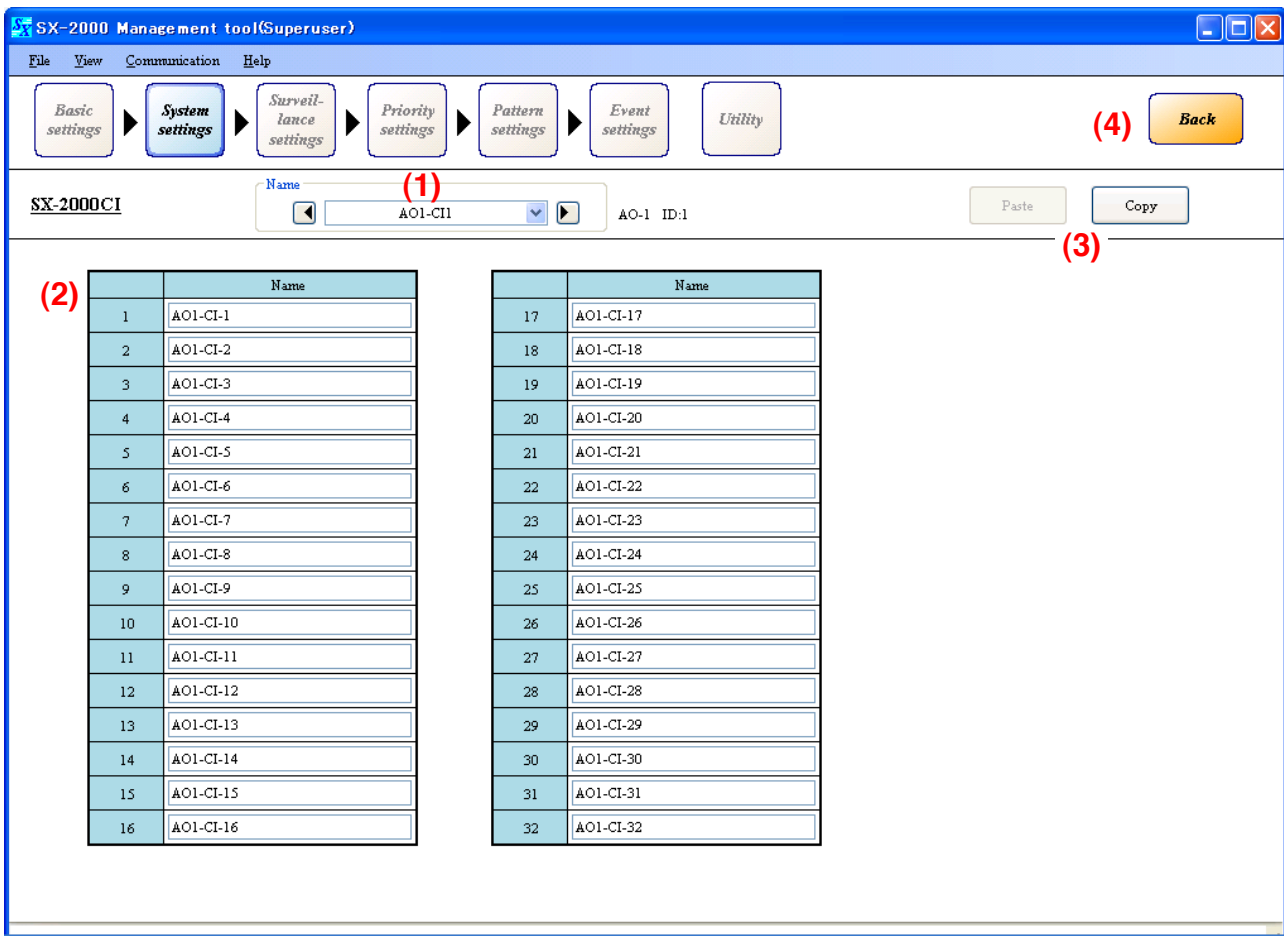
Make basic configurations for the SX-2000CI Control Input unit.

Clicking on the [SX-2000CI] icon in the system settings screen displays the detail settings screen.



To the next page

From the previous page



### (1) Name

Click on the box, or press the right or left arrow button to select the target SX-2000CI.

Default name, for example, AO1-CI1 represents the SX-2000CI of Unit No. 1 connected to the SX-2000AO or SX-2100AO of Unit No.1.

### (2) Control input

Enter each name of the control inputs of the SX-2000CI.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-CI-1 represents the Control Input No. 1 of the SX-2000CI connected to the SX-2000AO or SX-2100AO of Unit No. 1.)
--------------------	--

### (3) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000CI selected by Name (1).

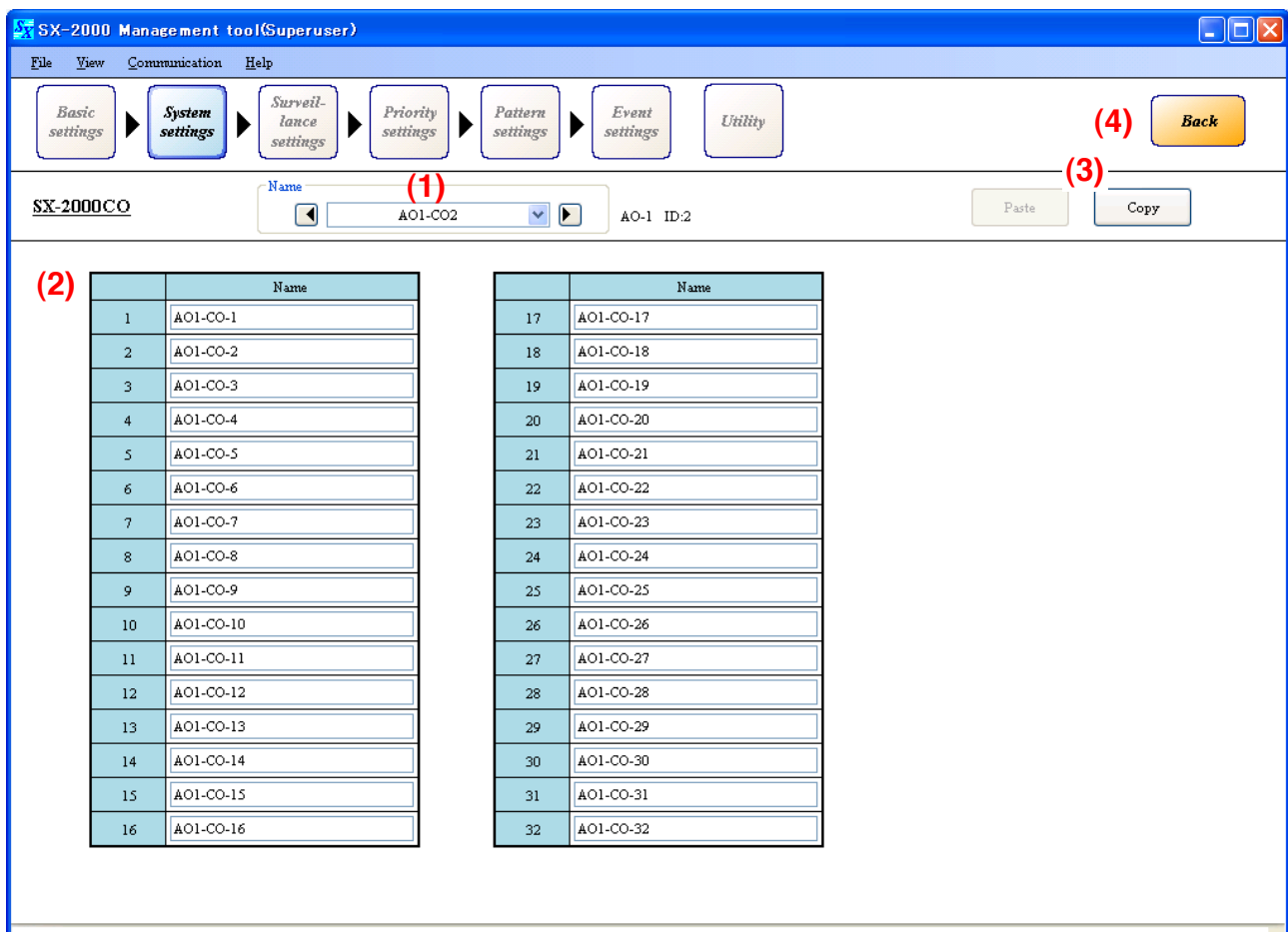
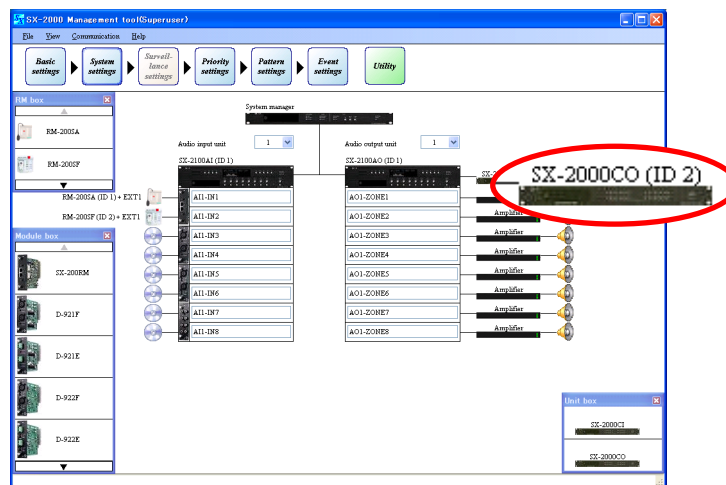
### (4) Back button

Returns to the previous screen.

## 8.7. SX-2000CO

Make basic configurations for the SX-2000CO Control Output unit.

Clicking on the [SX-2000CO] icon in the system settings screen displays the detail settings screen.



### (1) Name

Click on the box, or press the right or left arrow button to select the target SX-2000CO.

Default name, for example, AO1-CO2 represents the SX-2000CO of Unit No. 2 connected to the SX-2000AO or SX-2100AO of Unit No. 1.

**(2) Control output**

Enter each name of the control outputs of the SX-2000CO.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AO1-CO-1 represents the Control Output No. 1 of the SX-2000CO connected to the SX-2000AO or SX-2100AO of Unit No. 1.)
--------------------	---

**(3) Copy and Paste buttons**

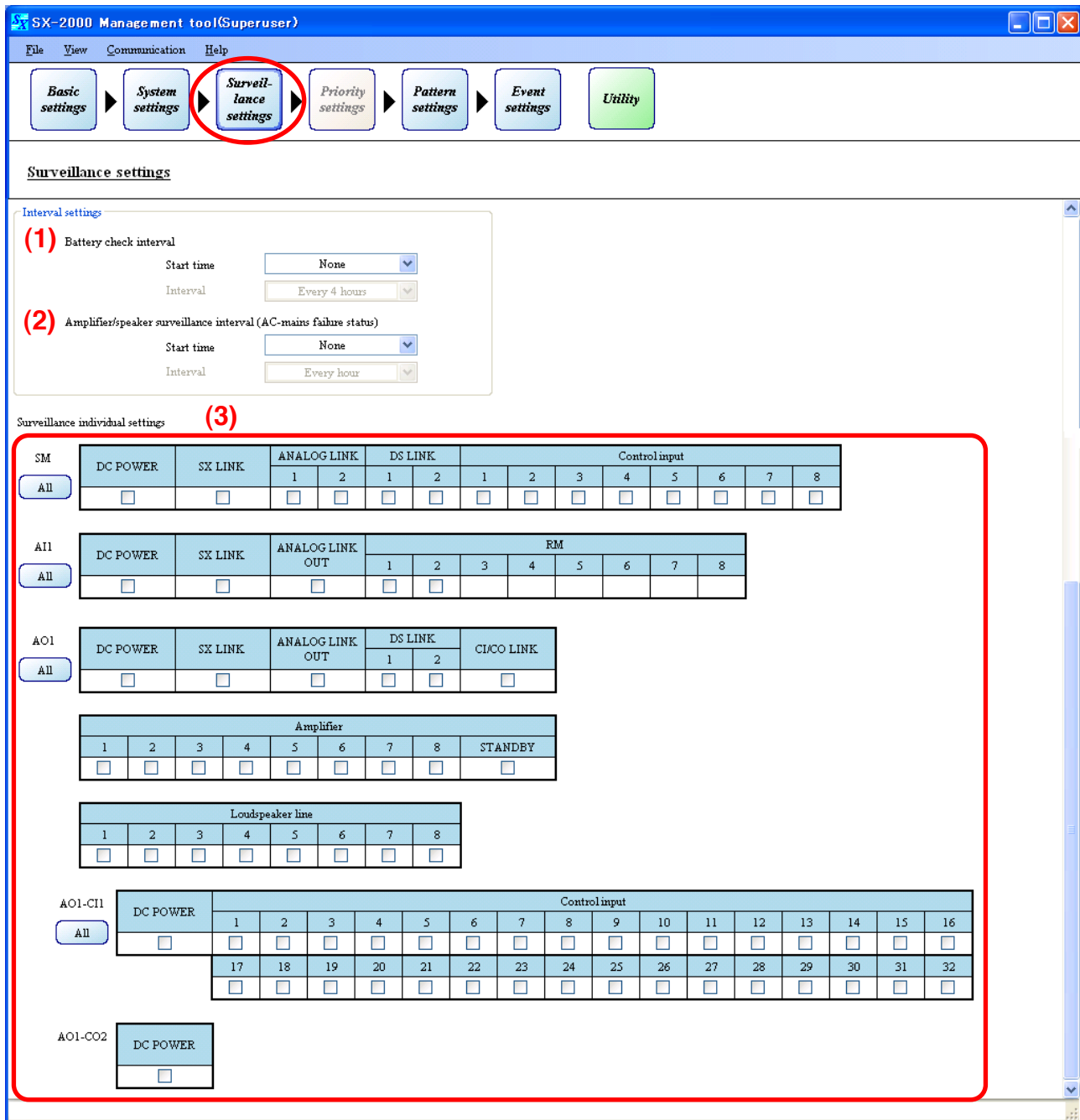
Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000CO selected by Name (1).

**(4) Back button**

Returns to the previous screen.

## 9. SURVEILLANCE SETTINGS

The surveillance settings screen below is displayed by clicking the [Surveillance settings] button, which becomes active when the "Surveillance function" is set to "Used" in the Common Settings items of the "Basic Settings" (p. 29).



### (1) Battery check interval

- **Start time**

Set the battery check start time.  
 The battery check is performed daily at the set time\*.

**Note:** Surveillance function cannot be performed when "None" is selected.

\* When the time set by the SX-2000SM has reached this set time. (Refer to p. 42 "SX-2000SM Time Settings.")

Available Settings	None (default), 00:00 – 23:00 (in 1-hour steps)
--------------------	---

- **Interval**

Available Settings	Every 4 hours (default), Every 12 hours, Every 24 hours
--------------------	---

## (2) Amplifier/speaker surveillance interval (AC-mains failure status)

Set the start time\* and interval for the amplifiers' and speaker lines' fault detection.

**Note:** Surveillance function cannot be performed when "None" is selected.

\* When the time set by the SX-2000SM has reached this set time. (Refer to [p. 42 "SX-2000SM Time Settings."](#))

- **Start time**

Available Settings	None (default), 00:00 – 23:00 (in 1-hour steps)
--------------------	---

- **Interval**

Available Settings	Every hour (default), Every 6 hours, Every 12 hours, Every 24 hours
--------------------	---

## (3) Surveillance individual settings

Set each surveillance function to ON or OFF.

Mark the corresponding checkboxes to use this function. (Default: OFF)

Clicking the [All] button sets all the surveillance items within the unit to ON or OFF.

The following statuses are monitored at each surveillance point on the screen. The unit whose surveillance points are selected checks to see;

DC POWER:	If the normal voltage is applied to both DC Power Input terminals.
SX LINK:	If the SX link cable is connected correctly.
ANALOG LINK:	If the analog link cables are connected correctly.
DS LINK:	If the VX-2000DS or VX-3000DS Emergency Power Supply units are operating correctly.
Control input:	If the control lines from the external devices are connected or shorted.

**Notes**

- SX-2100AI's, SX-2000AO's, and SX-2100AO's control input failure cannot be detected.
- When the surveillance function of the control inputs is set to "ON," the control inputs can receive no signal and remain in "break" (open) status if the control lines to the set control inputs are disconnected or shorted.

ANALOG LINK OUT: If the analog link cable is connected correctly.

**Note**

Uncheck when the cable is not connected to the analog link output terminal.

RM: If the connected remote microphones is operating correctly, or the cable from the remote microphones is connected.

CI/CO LINK: If the SX-2000CI or SX-2000CO is connected correctly.

Amplifier: If the external amplifiers connected to the SX-2100AO's Amplifier Input terminals are operating correctly. Amplifier statuses to be checked include amplifier connection, fuse, and operating temperature. (Refer to [p. 146.](#))

Loudspeaker line: If the speakers connected to the SX-2100AO's Speaker Connection terminals are operating correctly.

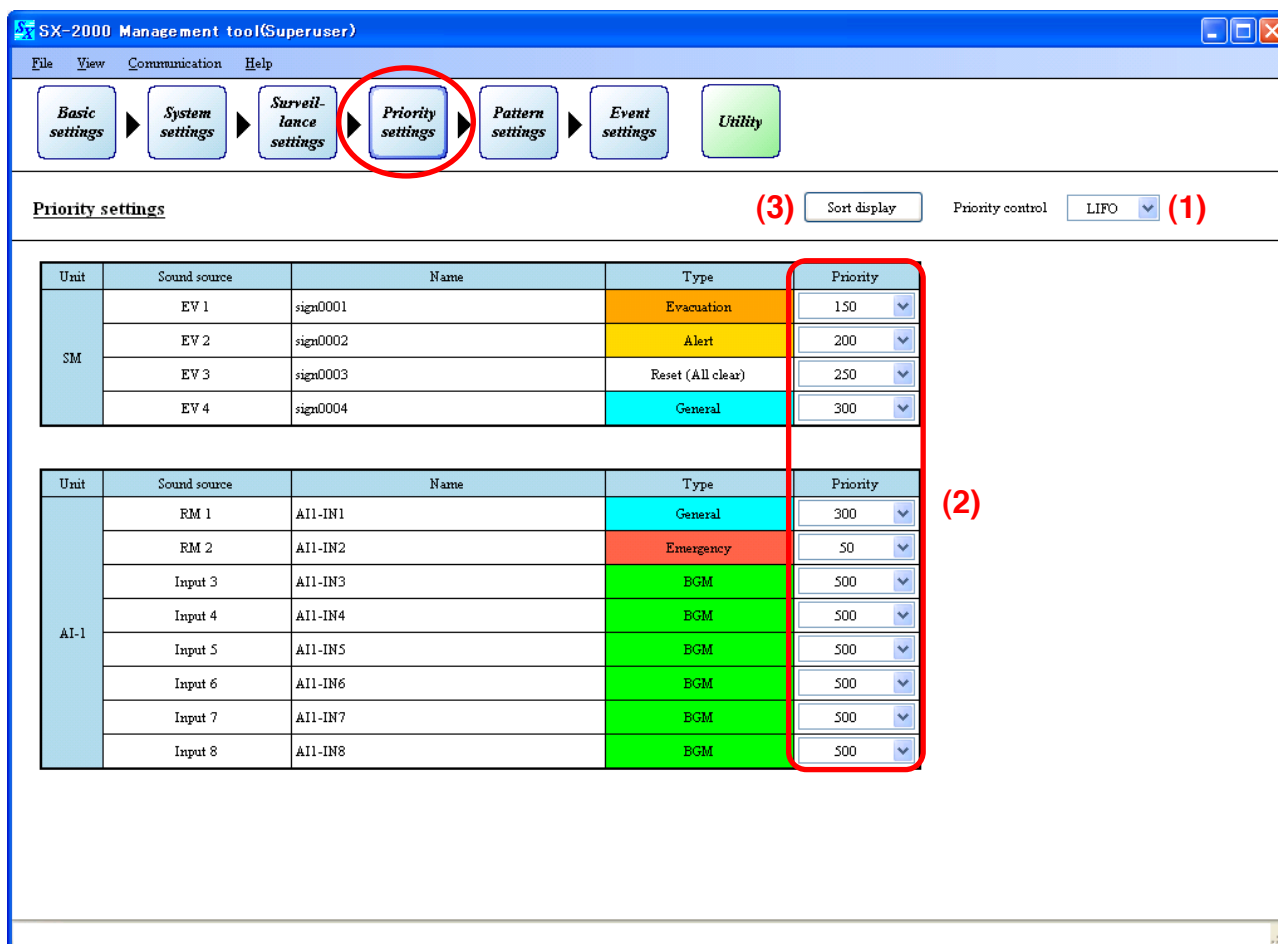
**Note**

For the detailed description of Speaker Line Surveillance function, refer to the separate Installation Manual.

For the correct connection at each surveillance point, refer to the separate Installation Manual, "Connections."

## 10. PRIORITY SETTINGS

Pressing the [Priority settings] button displays the screen below.  
Set input sound source priority levels.



### (1) Priority control

Select how to assign priority among multiple input sound sources all set to the same priority level.

#### Note

The control type cannot be set differently for individual sound sources.

Available Settings	FIFO, LIFO (default)
--------------------	----------------------

[When set to FIFO]

- Broadcast not possible to zones where a sound source with a higher priority is already broadcasting.
- Broadcast not possible to zones where a sound source with the same priority is already broadcasting.
- Broadcasts to zones where a sound source with a lower priority is already broadcasting will interrupt and override that lower priority broadcast.  
The original broadcast will resume once the broadcast from the higher priority sound source has finished.

[When set to LIFO]

- Broadcast not possible to zones where a sound source with a higher priority is already broadcasting.
- Broadcasts to zones where a sound source with the same priority is already broadcasting will interrupt and override that broadcast.  
The original broadcast will resume once the broadcast from the higher priority sound source has finished.
- Broadcasts to zones where a sound source with a lower priority is already broadcasting will interrupt and override that lower priority broadcast.  
The original broadcast will resume once the broadcast from the higher priority sound source has finished.

**(2) Priority**

Select priority levels. The smaller the number, the higher the priority level.

The priority range that can be set varies depending on the types of the sound sources.

Type	Priority	Default
Emergency	1 – 128	50
Evacuation	129 – 256	150
Alert	129 – 256	200
Reset (All clear)	129 – 256	250
General	257 – 512	300
BGM	257 – 512	500

- Emergency: Microphone announcement from the remote microphone of which type is "Emergency" or set to "Emergency/General."
- Evacuation: EV message broadcast of which type is set to "Evacuation."
- Alert: EV message broadcast of which type is set to "Alert."
- Reset: EV message broadcast of which type is set to "Reset."
- General: General-purpose pattern broadcast from the sound source of which type is set to "General," and microphone announcement from the remote microphone of which type is set to "General."
- BGM: General-purpose pattern broadcast from the sound source of which type is set to "BGM."

**Notes**

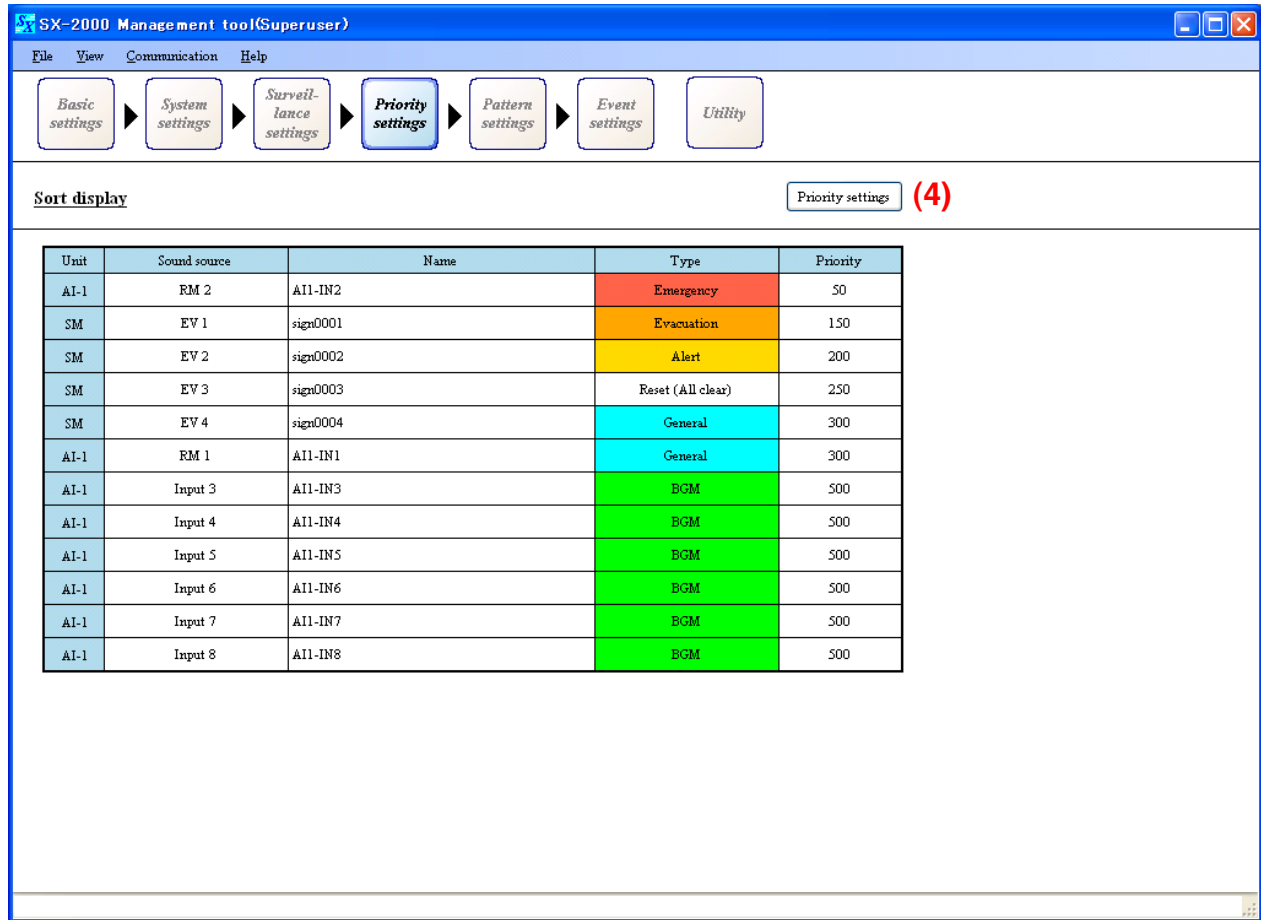
- Here, set the priority level when the BGM sound source is assigned to the general-purpose pattern broadcast. Priority levels for the "General" and "BGM" to be set here work among general-purpose sound sources or among BGM sound sources, and do not work between general-purpose sound sources and BGM sound sources.
- General-purpose sound sources and BGM sound sources are mixed when the BGM sound source is assigned to the general-purpose pattern broadcast. Volume level of the BGM sound sources can be attenuated in the ["Mixing Setting \(p. 53\)."](#)
- The priority levels set for BGM sources take effect when the BGM sources are assigned to general-purpose broadcast patterns. When the BGM sources are assigned to BGM patterns, their priority levels are made lowest in the system irrespective of their set priority levels.



**(3) Sorting display button**

Sorts the displayed sound sources in order from high to low priority levels.

[Sorting display screen]



**(4) Priority settings button**

Returns to the Priority setting screen on p. 71.

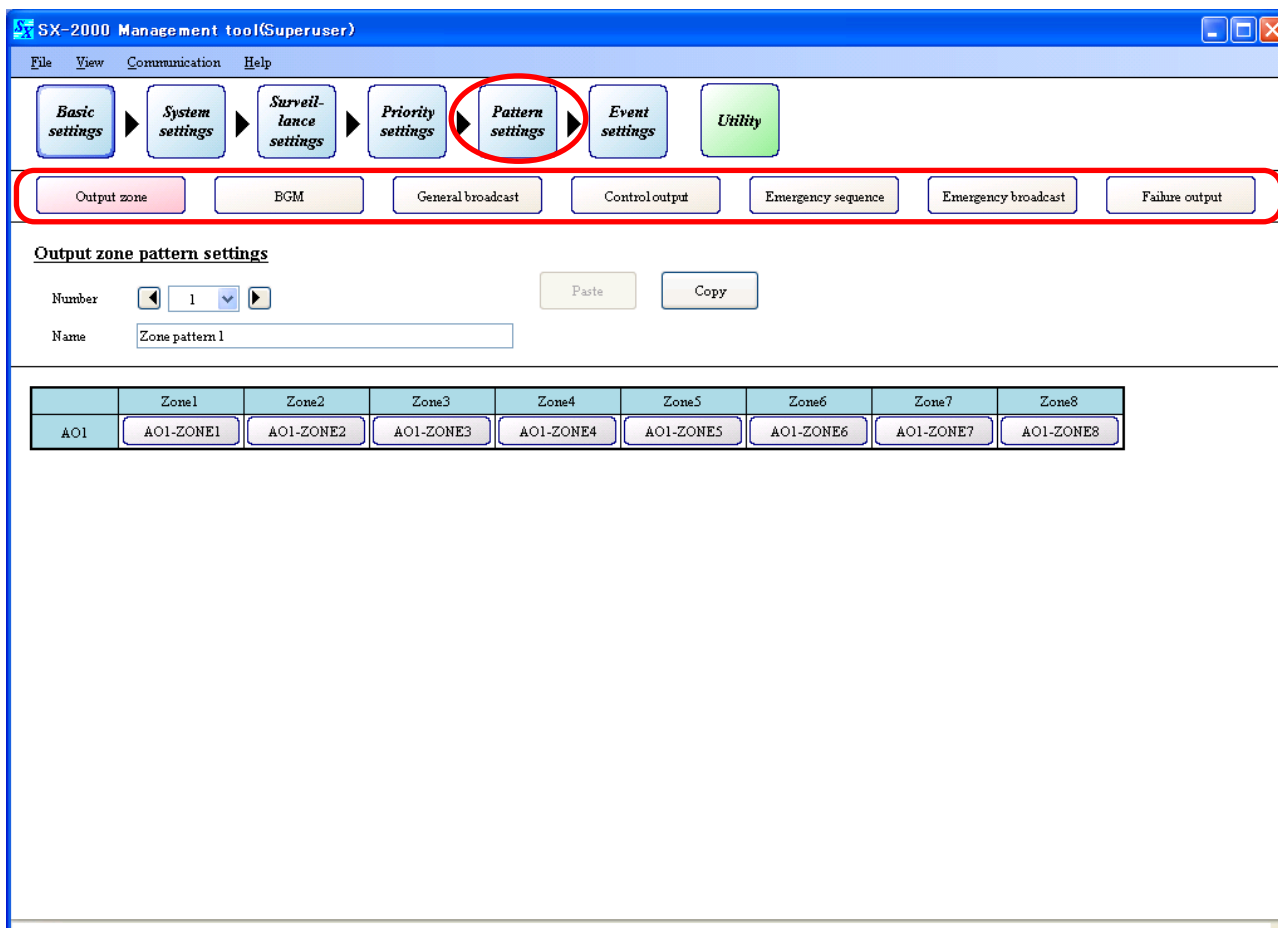
## 11. PATTERN SETTINGS

Pressing the [Pattern settings] button displays the screen below.

There are 7 types of patterns: Output zone patterns, BGM patterns, General broadcast patterns, Control output patterns, Emergency sequence patterns, Emergency broadcast patterns, and Failure output patterns.

Pattern settings for the Emergency sequence and Emergency broadcast can be selected only when the "Emergency broadcasting function" has been set to "Used" in the "Basic Settings" (p. 29).

Surveillance settings can be selected only when the "Surveillance function" has been set to "Used" in the "Basic Settings" (p. 29).



**SX-2000 Management tool(Superuser)**

File View Communication Help

Basic settings System settings Surveillance settings Priority settings **Pattern settings** Event settings Utility

Output zone BGM General broadcast Control output Emergency sequence Emergency broadcast Failure output

**Output zone pattern settings**

Number: 1 Paste Copy

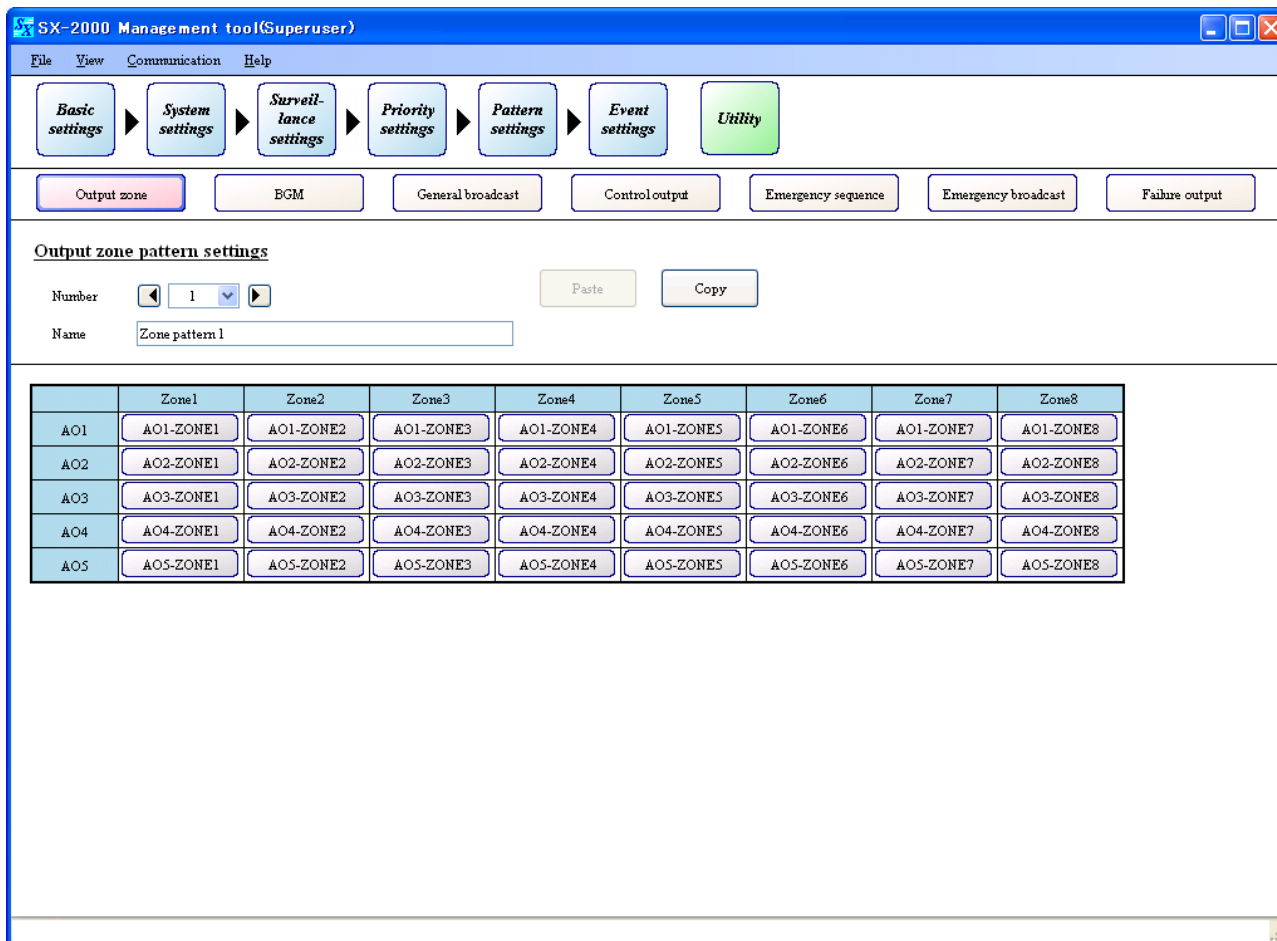
Name: Zone pattern 1

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8

### [Selecting multiple cells]

Multiple cells for each unit or output zone can be selected (or made active) in the setting screens of output zone patterns, BGM patterns, control output patterns, and failure output patterns. This function helps when a system requires multiple units' settings.

The example below shows a method to select multiple output zone when 5 SX-2000AO or SX-2100AO units are used.



• Method to select columns of cells for each output zone number

To select a column of cells in Zone 1, move the mouse pointer onto the circled "Zone 1" cell.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

Click it, and the cells of AO1 to AO5 in Zone 1 are all selected.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

**Note:** Clicking the "Zone 1" cell again cancels this selection.

• Method to select rows of cells for each unit number

To select a row of cells in AO1, move the mouse pointer onto the circled "AO1" cell.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

Click it, and the cells of Zone 1 to Zone 8 in AO1 are all selected.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

**Note:** Clicking the "AO1" cell again cancels this selection.

• Method to select all cells

Move the mouse pointer onto the circled upper left cell.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

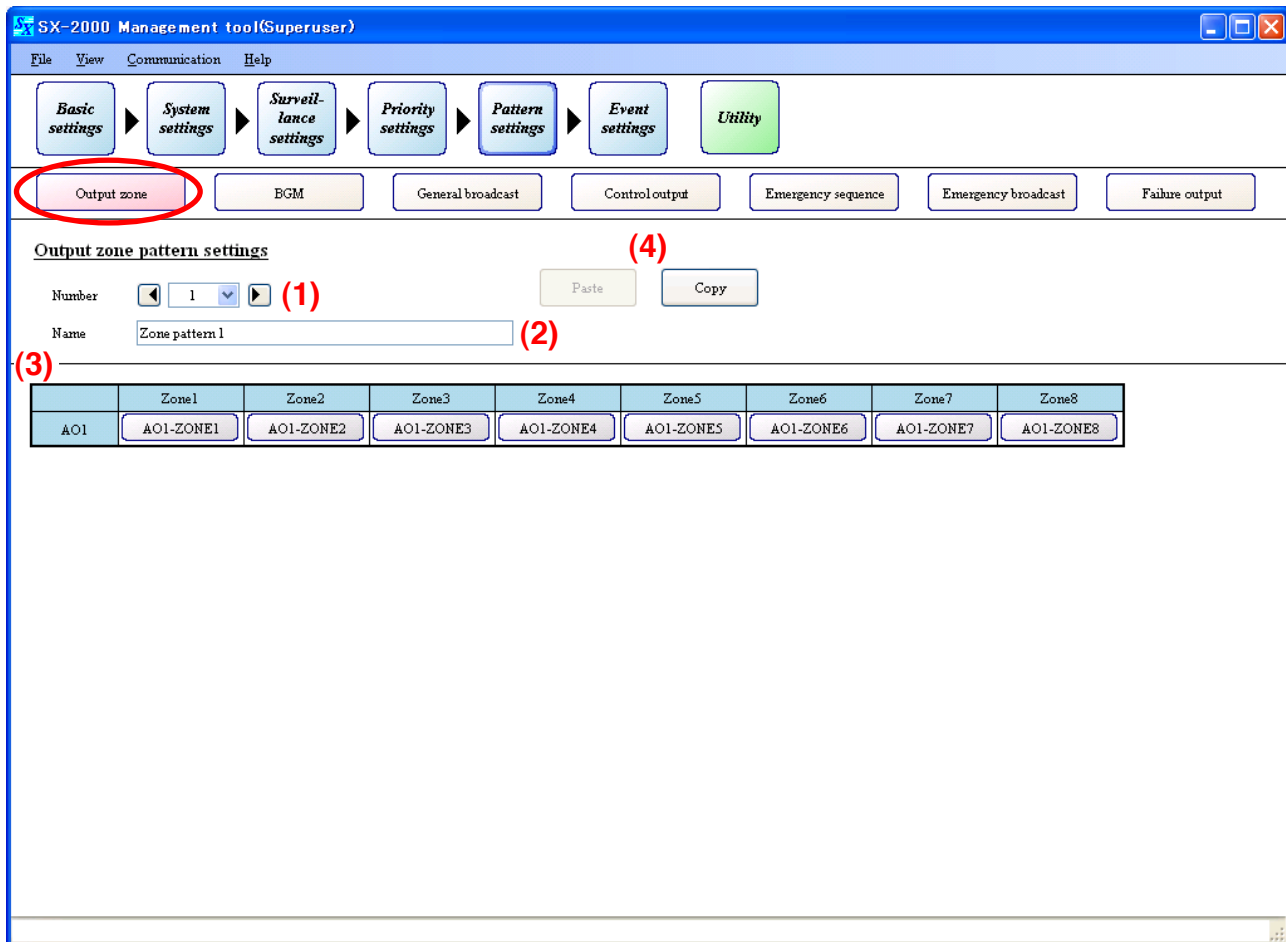
Click it, and all the cells are selected.

	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
AO2	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8
AO3	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8
AO4	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8
AO5	AO5-ZONE1	AO5-ZONE2	AO5-ZONE3	AO5-ZONE4	AO5-ZONE5	AO5-ZONE6	AO5-ZONE7	AO5-ZONE8

**Note:** Clicking the upper left cell again cancels this selection.

## 11.1. Output Zone Pattern Settings

Clicking the [Output zone] button on the pattern settings screen allows output zone patterns to be set. By allocating set output zone patterns to various broadcast patterns, broadcasts (General-purpose broadcast, and Emergency broadcast) can be made to any desired zones.



### (1) Number

Click on the box or press the arrow button to select the output zone pattern number.

Available Settings	1 to 128 (default: 1)
--------------------	-----------------------

### (2) Name

Enter the name of the output zone pattern.

Available Settings	Up to 32 alphanumeric characters. (default: Zone pattern 1 – 128)
--------------------	---

### (3) Zone ON/OFF buttons

[When selected]

Click the buttons corresponding to the zones to use.

**Tip:** For quick selection of multiple cells, refer to [p. 75 "Selecting multiple cells."](#)

	Zone1
AO1	AO1-ZONE1

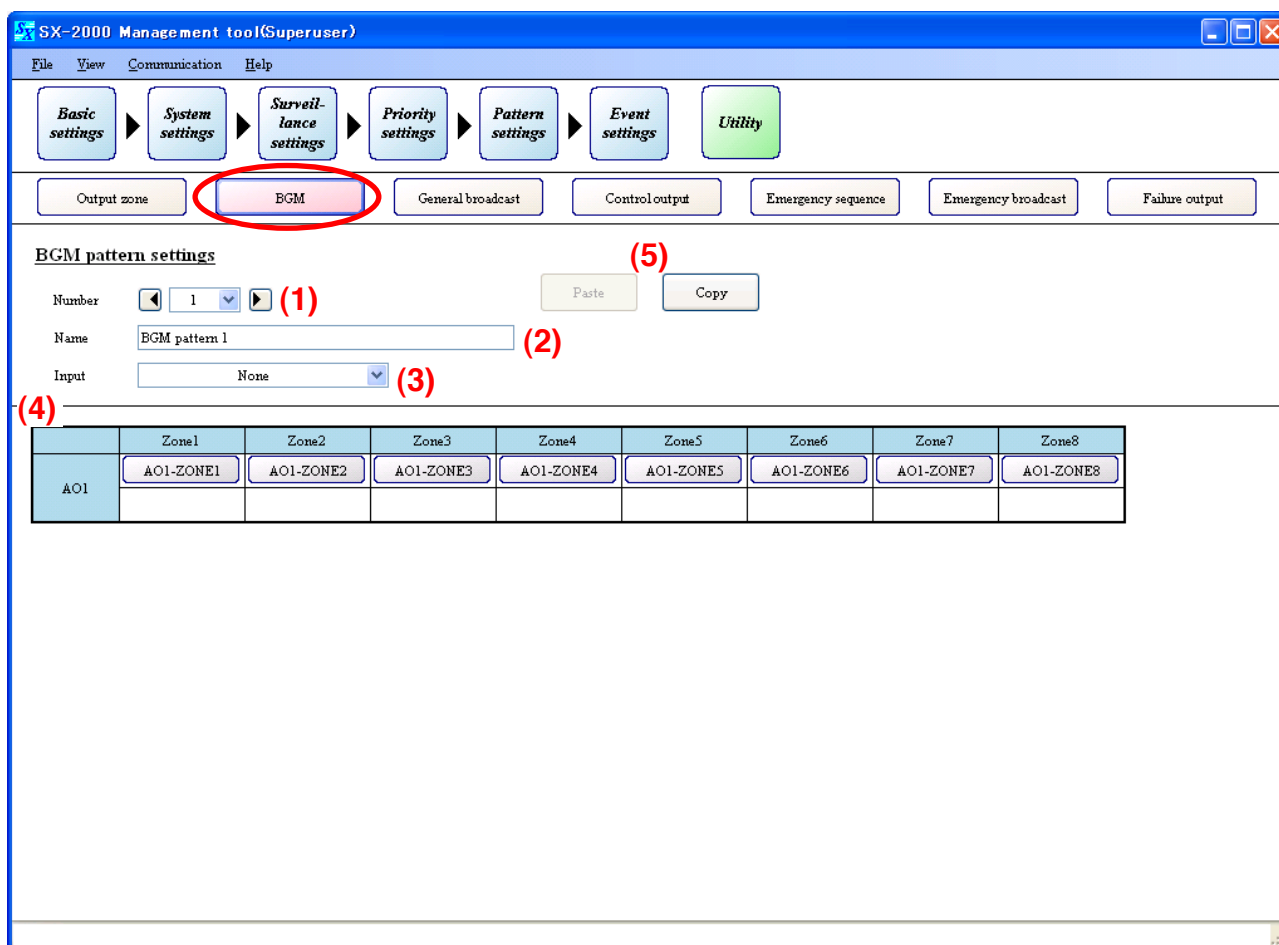
Available Settings	Colored (selected), Colorless (not selected, default)
--------------------	---

### (4) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other output zone pattern selected by Number (1).

## 11.2. BGM Pattern Settings

Clicking the [BGM] button on the pattern settings screen allows BGM patterns to be set.



### (1) Number

Click on the box or press the arrow button to select the BGM pattern number.

Available Settings	1 to 16 (default: 1)
--------------------	----------------------

### (2) Name

Set the names of the BGM pattern.

Available Settings	Up to 32 alphanumeric characters. (default: BGM pattern 1 –16)
--------------------	--

### (3) Input

Select the Audio Input Unit's input channel name set in "System Settings" (p. 51). This can be selected when the broadcast "Type" (p. 53) is set to "BGM."

Available Settings	None (default), Set input channel name
--------------------	--

### (4) Zone ON/OFF buttons

Select the zones to use with the Input (3) above selected. This allows the input name to be displayed in the box below the output zone name.

**Tip:** For quick selection of multiple cells, refer to p. 75 "Selecting multiple cells."

[When selected]

	Zone1
AO1	AO1-ZONE1
	AI1-IN3

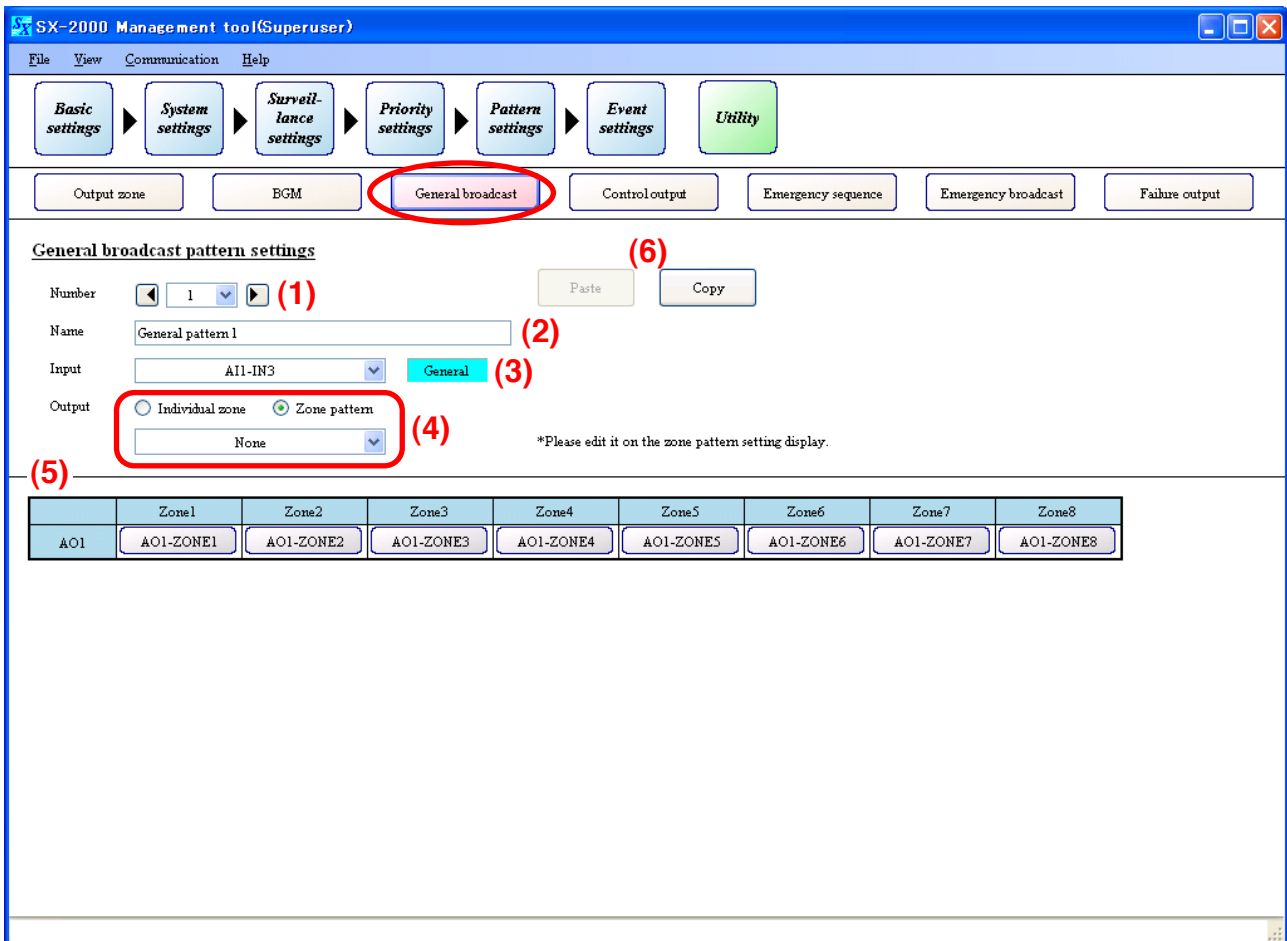
Available Settings	Colored (selected), Colorless (not selected, default)
--------------------	---

### (5) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other BGM pattern selected by Number (1).

## 11.3. General Broadcast Pattern Settings

Clicking the [General broadcast] button on the pattern settings screen allows General broadcast patterns to be set.



### (1) Number

Click on the box or press the arrow button to select the general broadcast pattern number.

Available Settings	1 to 128 (default: 1)
--------------------	-----------------------

### (2) Name

Enter the name of the general broadcast pattern.

Available Settings	Up to 32 alphanumeric characters. (default: General pattern 1 –128)
--------------------	---

### (3) Input

Select the EV message set for the SX-2000SM in the "System Settings" (p. 46) or the input channel name set for the SX-2000AI or SX-2100AI in the "System Settings" (p. 51). This can be selected when the broadcast "Type" (p. 53) is set to "General" or "BGM."

Available Settings	None (default), Set input channel name
--------------------	--

#### (4) Output

Select the General broadcast output zones.

The "Individual zone" or "Zone pattern" broadcast can be selected only when the input name has been set in (3) Input field.

Available Settings	Individual zone (default), Zone pattern
--------------------	---

Selecting the "Zone pattern" allows output zone patterns to be selected.

Available Settings	None (default), Set output zone pattern
--------------------	---

#### (5) Zone ON/OFF buttons

This setting is valid when the "Individual zone" has been selected in (4) Output field.

If "Zone pattern" has been selected, the zone patterns set in the "Output Zone Pattern Settings" (p. 77) are displayed.

[When selected]

	Zone1
AO1	AO1-ZONE1

Available Settings	Colored (selected), Colorless (not selected, default)
--------------------	---

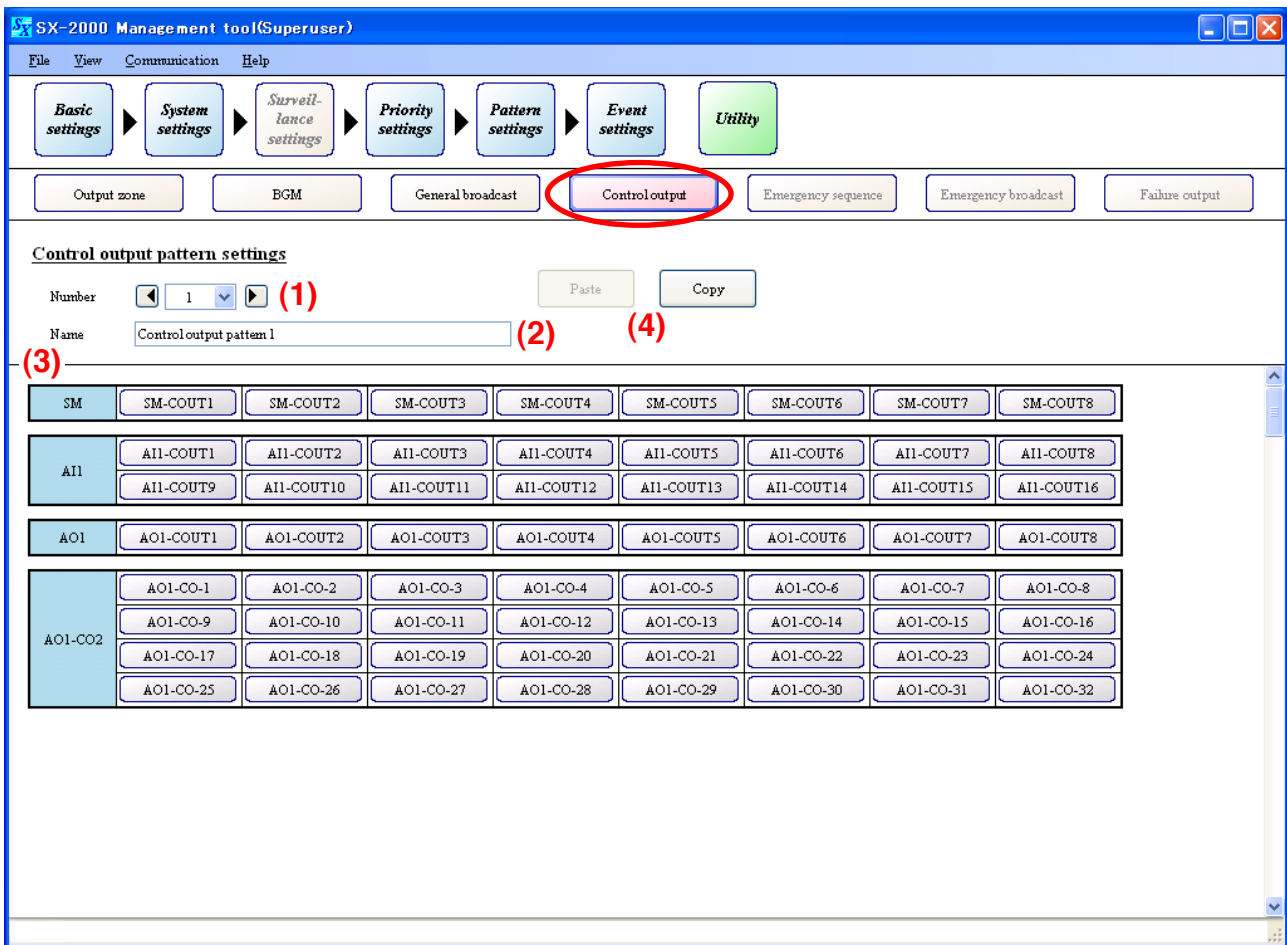
#### (6) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other general broadcast pattern selected by Number (1).



## 11.4. Control Output Pattern Settings

Clicking the [Control output] button on the pattern settings screen allows Control output patterns to be set.



### (1) Number

Click on the box or press the arrow button to select the control output pattern number.

Available Settings	1 to 256 (default: 1)
--------------------	-----------------------

### (2) Name

Enter the name of the control output pattern.

Available Settings	Up to 32 alphanumeric characters. (default: Control output pattern 1 – 256)
--------------------	---

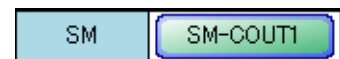
### (3) Control output ON/OFF buttons

Select the control output terminals to perform control.

[When selected]

#### Tip

For quick selection of multiple cells, refer to [p. 75 "Selecting multiple cells."](#)



Available Settings	Colored (selected), Colorless (not selected, default)
--------------------	---

### (4) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other control output pattern selected by Number (1).

## 11.5. Emergency Sequence Settings

Clicking the [Emergency sequence] button on the pattern settings screen allows Emergency sequences to be set.

### (1) Number

Click on the box or press the arrow button to select the emergency sequence number.

Available Settings	1 to 4 (default: 1)
--------------------	---------------------

### (2) Name

Enter the name of the emergency sequence.

Available Settings	Up to 32 alphanumeric characters. (default: Emergency sequence 1 – 4)
--------------------	---

### (3) Message (Phase 1)

Select the EV Message registered in the SX-2000SM (p. 46) on the System Setting screen.

The selectable EV message type is "Alert" or "Evacuation."

The selected message type is displayed on the right of the message box.

Available Settings	None (default), Set EV messages
--------------------	---------------------------------

### (4) Duration (min) (Phase 1)

Select the playback duration of the EV Message to be broadcast repeatedly.

Available Settings	Endless (default), 1 – 20 (minutes)
--------------------	-------------------------------------

### Note

To register the EV Message in Phases 2 and 3, "Duration" for the preceding phase should be set to a limited time except "Continuous."

## (5) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other emergency sequence selected by Number (1).

## 11.6. Emergency Broadcast Pattern Settings

Clicking the [Emergency broadcast] button on the pattern settings screen allows Emergency broadcast patterns to be set.

The screenshot shows the 'Emergency broadcast pattern settings' window. At the top, there are navigation buttons: Basic settings, System settings, Surveillance settings, Priority settings, Pattern settings, Event settings, and Utility. Below these are buttons for Output zone, BGM, General broadcast, Control output, Emergency sequence, Emergency broadcast (circled in red), and Failure output. The main area is titled 'Emergency broadcast pattern settings' and contains the following fields:

- Number:** A dropdown menu set to '1' (annotated with (1)).
- Name:** A text box containing 'Emergency pattem 1' (annotated with (2)).
- Sequence:** A dropdown menu set to '001: Emergency sequence 1' (annotated with (3)).
- Copy/Paste:** Two buttons labeled 'Paste' and 'Copy' (annotated with (7)).
- Phase 1:**
  - Message:** 'Alert' (highlighted in yellow).
  - Text:** 'sign0001'.
  - Duration (min):** '5'.
  - Output:** A dropdown menu set to 'None' (annotated with (4)).
  - Control output:** A dropdown menu set to 'None' (annotated with (5)).
  - Radio buttons:** 'Individual zone' and 'Zone pattern' (the latter is selected).
- Phase 2:**
  - Message:** 'Evacuation' (highlighted in yellow).
  - Text:** 'sign0002'.
  - Duration (min):** 'Endless'.
  - Output:** A dropdown menu set to 'None'.
  - Control output:** A dropdown menu set to 'None'.
  - Radio buttons:** 'Individual zone' and 'Zone pattern' (the latter is selected).
  - Buttons:** 'Same as phase 1' and 'Same as phase 2' (the former is circled in red and annotated with (6)).
- Phase 3:**
  - Message:** (empty text box).
  - Text:** (empty text box).
  - Duration (min):** (empty text box).
  - Output:** A dropdown menu set to 'None'.
  - Control output:** A dropdown menu set to 'None'.
  - Radio buttons:** 'Individual zone' and 'Zone pattern' (the latter is selected).

### (1) Number

Click on the box or press the arrow button to select the emergency broadcast pattern number.

Available Settings	1 to 128 (default: 1)
--------------------	-----------------------

### (2) Name

Enter the name of the emergency broadcast pattern.

Available Settings	Up to 32 alphanumeric characters. (default: Emergency pattern 1 – 128)
--------------------	--

### (3) Sequence

Select the sequence name set in the "Emergency Sequence Settings" (p. 82).

Available Settings	None (default), Set Emergency Sequences
--------------------	---

#### (4) Output

Set the output zone of the EV message in each phase status.

Available Settings	Individual zone, Zone pattern (default)
--------------------	---

Selecting the "Individual zone" permits the Audio Output unit's output zone (Individual) to be selected.

Available Settings	None (default), Output zone (Individual)
--------------------	--

Selecting the "Zone pattern" permits the output zone pattern name set in the ["Output Zone Pattern Settings"](#) (p. 77) to be selected.

Available Settings	None (default), Output zone (Pattern)
--------------------	---------------------------------------

#### (5) Control output pattern

Select the control output pattern name set in the ["Control Output Pattern Settings"](#) (p. 81).

Available Settings	None (default), Set control output patterns
--------------------	---

#### (6) [Same as phase 1], [Same as phase 2] Button

Clicking the [Same as Phase 1] button copies the output zone and control output settings set in Phase 1 to those boxes in the Phase 2.

Likewise, clicking the [Same as Phase 2] button copies the output zone and control output settings set in the Phase 2 to those boxes in the Phase 3.

#### (7) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other emergency broadcast pattern selected by Number (1).

## 11.7. Failure Output Pattern Settings

Clicking the [Failure output] button on the pattern settings screen allows Failure output patterns to be set.

**Failure output pattern settings** (6)

Number: 1 (1) Paste Copy

Name: Failure output pattern 1 (2)

System failure: DC POWER DC FUSE DS LINK SX LINK RM LINK (3)

RM	Input1	Input2	Input3	Input4	Input5	Input6	Input7	Input8
AI1	AI1-RM1	AI1-RM2						

Amplifier	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8	Standby
AO1	AO1-ZONE1								

Loudspeaker	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
AO1								

External failure input: None (4)

Failure status output: None (5)

Settings made here are operatively associated with the [p. 69 "Surveillance Settings."](#)  
Select the units or the surveillance target points.

### • Selecting the units (Designate the units as factors to activate failure output pattern.)

At least one or more surveillance points must be set to the unit to be selected here to enable Surveillance function.

This failure output pattern is activated when irregularity is detected at the surveillance points of the selected unit. Determine the method to activate the set failure output patterns using the ["Event Settings \(p. 87\)."](#)

Characters on each setting button on the screen represent the unit names as shown below.

- SM: SX-2000SM
- AI1: SX-2000AI or SX-2100AI with device No. set to "1."
- AI1-RM1: RM-200SF and RM-210, RM-200S and RM-210, or RM-200SA and RM-210 connected to AI1's Input 1.
- AI1-RM2: RM-200SF and RM-210, RM-200S and RM-210, or RM-200SA and RM-210 connected to AI1's Input 2.
- AO1: SX-2000AO or SX-2100AO with Unit No. set to "1," and its connected SX-2000CI and SX-2000CO.
- AO1-ZONE 1 in Amplifier item: External amplifier connected to the Amplifier Input terminal of AO1 used for Zone 1.
- AO1-ZONE 1 in Loudspeaker item: Speakers connected to the Speaker Connection terminals of AO1 used for Zone 1.

### • Selecting the surveillance target points (Designate the surveillance target points as factors to activate failure output pattern.)

Each setting button in the "System failure" becomes active when the following surveillance points are marked in any one of the units within the system in the ["Surveillance Settings \(p. 69\)."](#)

This failure output pattern is activated when irregularity is detected at the selected surveillance points set to

any one of the units within the system.

Determine the method to activate the failure output patterns using the ["Event Settings \(p. 87\)."](#)

Each setting button on the screen represents the surveillance points as shown below.

DC POWER: DC power of the SX-2000SM, SX-2000AI, SX-2100AI, SX-2000AO, SX-2100AO, SX-2000CI, or SX-2000CO

DC FUSE\*: Fuse inside the amplifier connected to the SX-2100AO

DS LINK: DS link of the SX-2000SM and SX-2100AO

SX LINK: SX link of the SX-2000SM, SX-2000AI, SX-2100AI, SX-2000AO, and SX-2100AO

RM LINK: RM link of the remote microphone connected to the SX-2000AI or SX-2100AI

\* DC FUSE setting button becomes active when the "Amplifier" checkbox is marked in the ["Surveillance Settings \(p. 69\)."](#)

### (1) Number

Click on the box or press the arrow button to select the failure output pattern number.

Available Settings	1 to 256 (default: 1)
--------------------	-----------------------

### (2) Name

Enter the names of the failure output pattern.

Available Settings	Up to 32 alphanumeric characters. (default: Failure output pattern 1 – 256)
--------------------	---

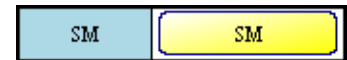
### (3) Failure detection units or surveillance target points settings

Select the units or surveillance target points as factors to activate failure output patterns.

[When selected]

#### Tip

For quick selection of multiple cells, refer to [p. 75 "Selecting multiple cells."](#)



Available Settings	Colored (Selected), Colorless (Not selected, default)
--------------------	---

### (4) External failure input

This function is available when the ["External failure input" \(p. 97\)](#) is set to the control input terminals of the SX-2000SM, SX-2100AI, SX-2000AO, SX-2100AO, and SX-2000CI.

#### Note

Use the Event of each unit in the "Event Settings" to set the function to the control input terminals.

For details, refer to [pages 101 – 119](#).

Available Settings	None (default), External failure input terminals set in the "Event Settings."
--------------------	---

### (5) Failure status output

Set the control output pattern to be output when the set failure output pattern has occurred.

This setting item is valid when at least one surveillance target point is selected in the item (3).

Available Settings	None (default), Set control output patterns
--------------------	---

### (6) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the name preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other failure output pattern selected by Number (1).

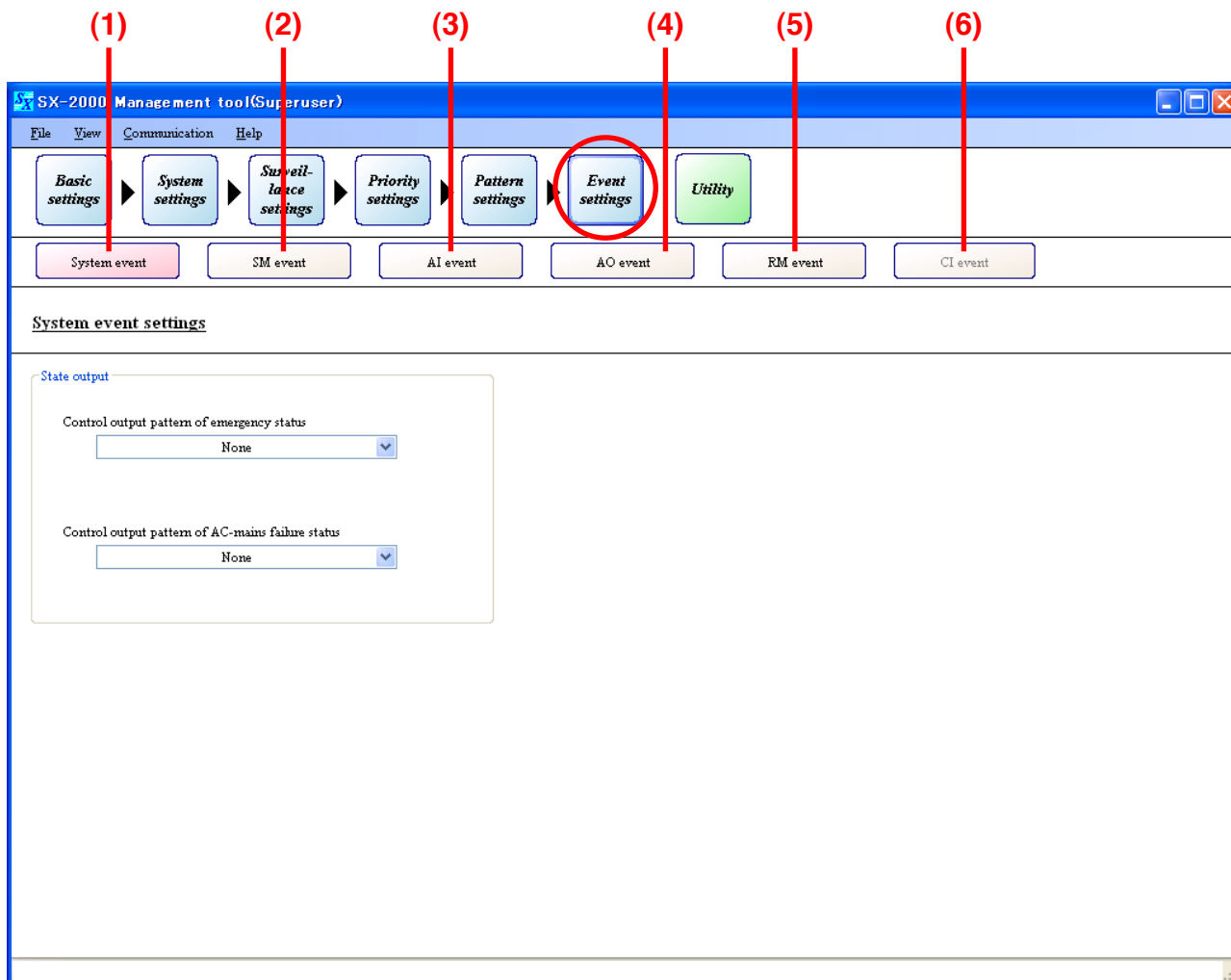
## 12. EVENT SETTINGS

Pressing the [Event settings] button displays the screen below.

Set System event, and assign functions to the Control input terminals of the SM, AI, AO, and CI, Function keys of the AI, AO, and RM, and Channel keys of the AI and AO.

### Note

"SM" represents SX-2000SM, "AI" SX-2000AI and SX-2100AI, "AO" SX-2000AO and SX-2100AO, "CI" SX-2000CI, and "RM" RM-200SF, RM-200S, RM-200SA, and RM-210.



Pressing each button (1 – 6) displays the corresponding setting screen.

#### (1) System event button

Set control output patterns when the system is in emergency and power failure modes. (Refer to [p. 100.](#))

#### (2) SM event button

Set functions to be assigned to the SX-2000SM's control input terminals. (Refer to [p. 101.](#))

#### (3) AI event button

Set functions to be assigned to the control input terminals (SX-2100AI only), and Function and Channel keys of the SX-2000AI and SX-2100AI. (Refer to [p. 105.](#))

#### (4) AO event button

Set functions to be assigned to the control input terminals, and Function and Channel keys of the SX-2000AO and SX-2100AO. (Refer to [p. 109.](#))

#### (5) RM event button

Set functions to be assigned to the keys of the RM-200SF, RM-200S, RM-200SA, and RM-210. (Refer to [p. 112.](#))

#### (6) CI event button

Set functions to be assigned to the SX-2000CI's control input terminals. (Refer to [p. 119.](#))

## 12.1. Assignable Functions and Explanations

Assigned to  Function	Control input terminals		Function keys	Channel keys	RM keys	Reference page
	SX-2000SM	SX-2100AI SX-2000AO SX-2100AO SX-2000CI	SX-2000AI SX-2100AI SX-2000AO SX-2100AO	SX-2000AI SX-2100AI SX-2000AO SX-2100AO	RM-200SF RM-200S RM-200SA RM-210*1	
General broadcast			✓	✓	✓	P. 90
General broadcast (Level)	✓	✓				P. 90
General broadcast (Pulse)	✓	✓				P. 91
BGM pattern change/end	✓	✓	✓		✓	P. 92
Zone volume adjustment (Pulse)	✓	✓				P. 93
Zone volume attenuation (Level)	✓	✓				P. 93
Time adjustment	✓					P. 93
Emergency broadcast pattern start*2	✓	✓			✓ *2	P. 94
Emergency broadcast pattern stop*2	✓	✓			✓ *2	P. 94
Emergency sequence stop*2	✓	✓			✓ *2	P. 94
Emergency sequence phase shift*2	✓	✓			✓ *2	P. 94
Emergency reset*2	✓	✓			✓ *2	P. 94
Failure output receipt*3	✓	✓			✓	
Failure output reset*3	✓	✓			✓	
External failure input*3	✓	✓				P. 97
RM broadcast status					✓	P. 98
General EV broadcast					✓	P. 99
Channel ON/OFF				✓		
Zone selection (Pattern)					✓	
Zone selection (Individual)					✓	
Zone selection clear					✓	
Lamp test					✓ *4	

\*1 Assignable functions to the RM-210 differ depending on the type of remote microphone the RM-210 is connected to. The same functions as those assigned to the remote microphone (RM-200SF, RM-200SA, or RM-200S) can be assigned to the RM-210.

\*2 These functions are available for the control input terminals and RM-200SF when the emergency broadcasting function is set to "Used" in the "Basic Settings."  
In addition to this setting, for the RM-200SA, these functions are available when its type is set to "Emergency/General" in the "System Settings." For the RM-200S, these functions are unavailable, regardless of whether or not the above settings are performed.

\*3 These functions are available when the surveillance function is set to "Used" in the "Basic Settings."

\*4 This function cannot be assigned to the RM-200S.

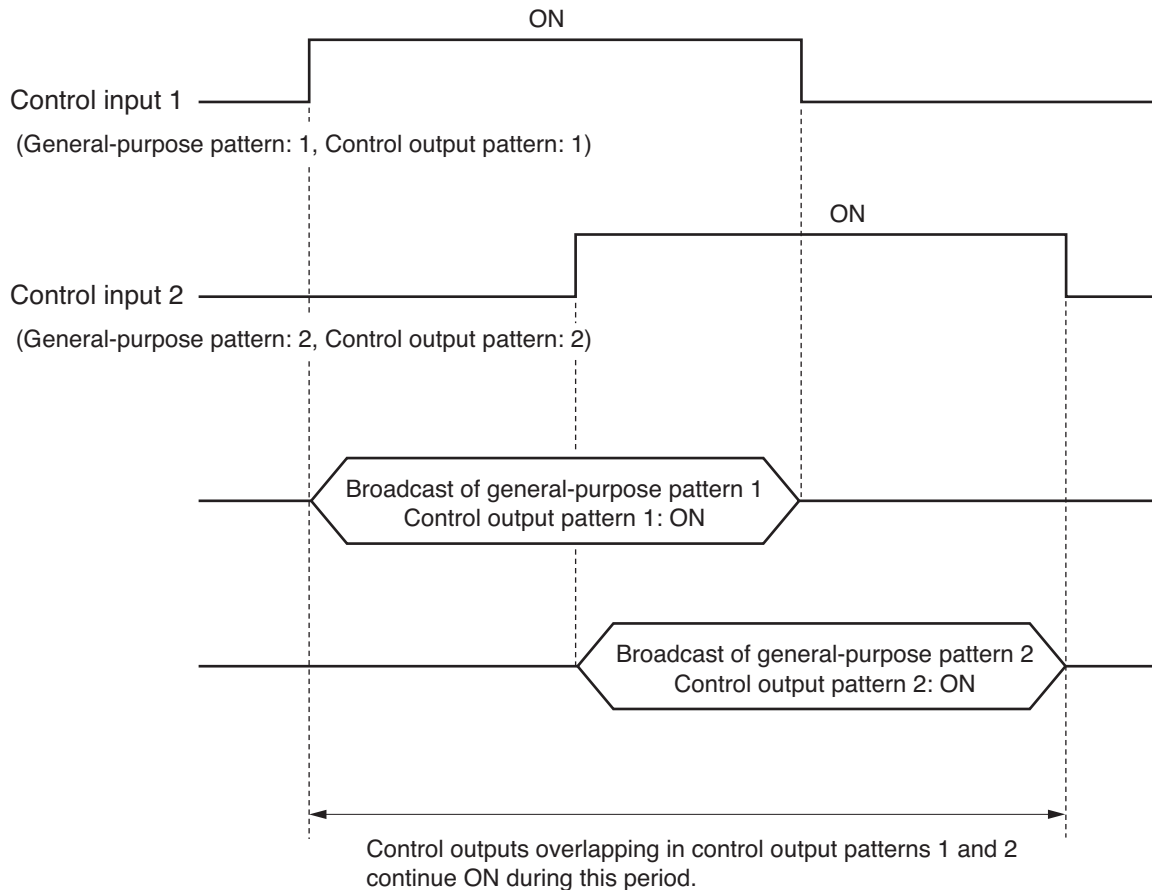


- General broadcast: Activates general-purpose pattern broadcast using the key. (Refer to [p. 90.](#))
- General broadcast (Level): Activates general pattern broadcasts using the control input (Level). (Refer to [p. 90.](#))
- General broadcast (Pulse): Activates general pattern broadcasts using the control input (Pulse). (Refer to [p. 91.](#))
- BGM pattern change/end: Activates or ends BGM pattern broadcast using the key or control input. (Refer to [p. 92.](#))
- Zone volume adjustment (Pulse): Adjusts the volume level of the zone output pattern using the key or control input (Pulse). (Refer to [p. 93.](#))
- Zone volume attenuation (Level): Decreases volume level of the zone output pattern using the key or control input (Level). (Refer to [p. 93.](#))
- Time adjustment: Zero-adjusts the SX-2000SM's internal clock. (Refer to [p. 93.](#))
- Emergency broadcast pattern start: Activates the emergency broadcast pattern using the key or control input. (Refer to [p. 94.](#))
- Emergency broadcast pattern stop: Stops the activated emergency broadcast pattern using the key or control input. (Refer to [p. 94.](#))
- Emergency sequence stop: Stops the activated all emergency broadcast patterns which include the designated emergency sequence using the key or control input. (Refer to [p. 94.](#))
- Emergency sequence phase shift: Shifts the phase in progress to the next phase in the emergency broadcast pattern's sequence using the key or control input. (Refer to [p. 94.](#))
- Emergency reset: Terminates the emergency broadcast state using the key or control input, and returns the system to the normal state. (Refer to [p. 94.](#))
- Failure output receipt: Receives the activated failure output pattern using the key or control input. When this function is assigned to the control input, any activated failure pattern in the system can be acknowledged by the control input, while when assigned to the remote microphone's key, only the activated specific failure pattern can be acknowledged by the key. (See the separate Operating Instructions, "Operation.")
- Failure output reset: Resets all fault state in the system using the key or control input. (See the separate Operating Instructions, "Operation.")
- External failure input: Accepts an external failure state. (Refer to [p. 97.](#))
- RM broadcast status: Displays the current broadcast status of other remote microphone(s) on the remote microphone's function key. (Refer to [p. 98.](#))
- General EV broadcast: Calls up the EV message from the remote microphone's function key for broadcast. (Refer to [p. 99.](#))
- Channel ON/OFF: Turns the channel ON or OFF.
- Zone selection (Pattern): Selects the Remote Microphone announcement zones using the patterns. (See the separate Operating Instructions, "Operation.")
- Zone selection (Individual): Selects each SX-2000AO's or SX-2100AO's channel through which Remote Microphone announcements are output. (See the separate Operating Instructions, "Operation.")
- Zone selection clear: Resets zones being selected by the Remote Microphone.
- Lamp test: Performs the lamp test of the RM-200SF's or RM-200SA's indicators.

## 12.2. Function Description

### 12.2.1. General-purpose pattern broadcasts, General-purpose pattern broadcasts (Level)

When different control inputs turn ON, general-purpose pattern broadcasts activated by each control input\* are made simultaneously.



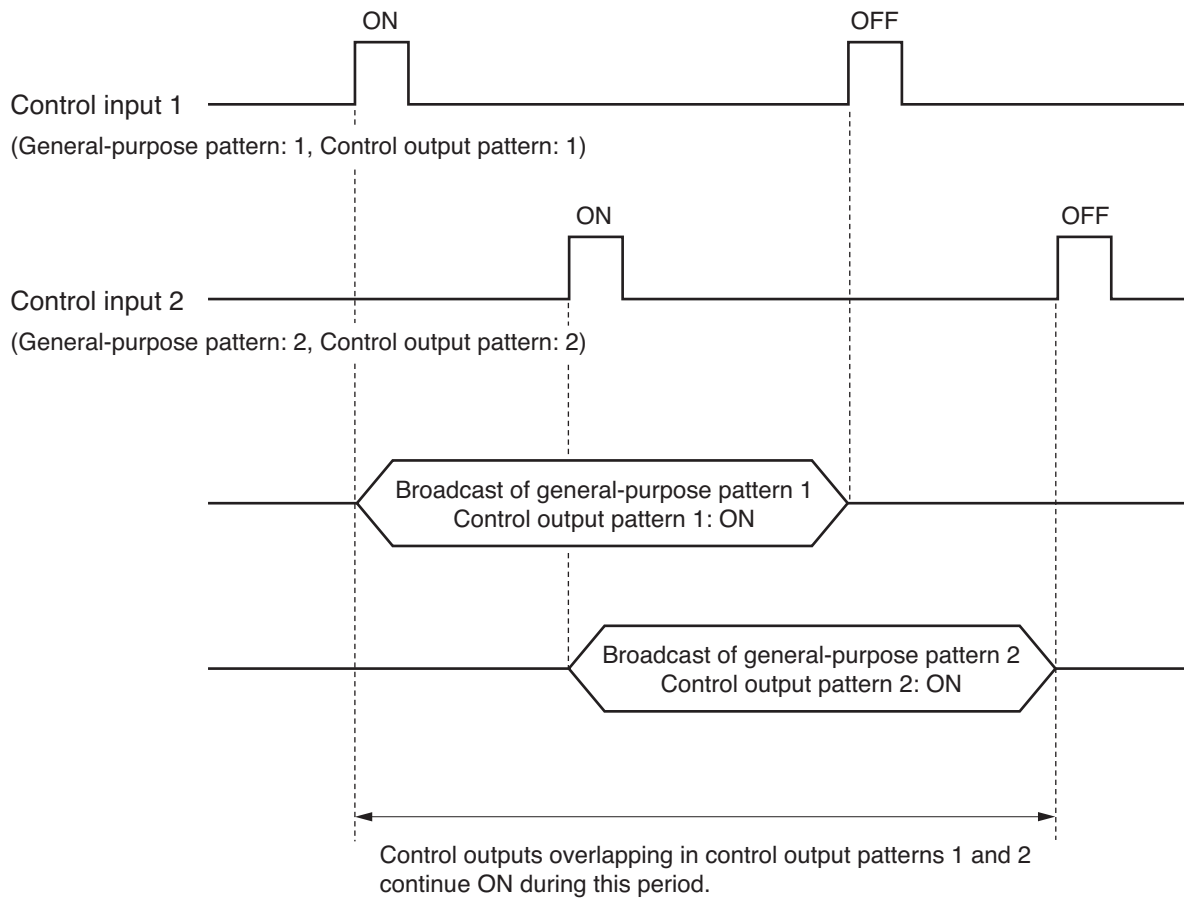
General-purpose patterns and control output patterns in the above example operate as follows:

- Example of general-purpose pattern operation  
General-purpose pattern 1 activated when control input 1 is ON continues until control input 1 turns OFF.  
General-purpose pattern 2 activated when control input 2 is ON continues until control input 2 turns OFF.
- Example of control output operation  
Control output pattern 1 activated when control input 1 is ON continues until control input 1 turns OFF.  
Control output pattern 2 activated when control input 2 is ON continues until control input 2 turns OFF.  
The state of control outputs overlapping in control output patterns 1 and 2 continues during the period from the time control input 1 turns ON until control input 2 turns OFF. (OR logic output)

\* This timing chart also applies when general-purpose pattern broadcasts are activated by the function keys or channel keys of the SX-2000AI, SX-2100AI, SX-2000AO, or SX-2100AO, or the function keys of the RM-200SF, RM-200S, RM-200SA, or RM-210.

### 12.2.2. General-purpose pattern broadcasts (Pulse)

When different control inputs turn ON, general-purpose pattern broadcasts activated by each control input\* are made simultaneously.



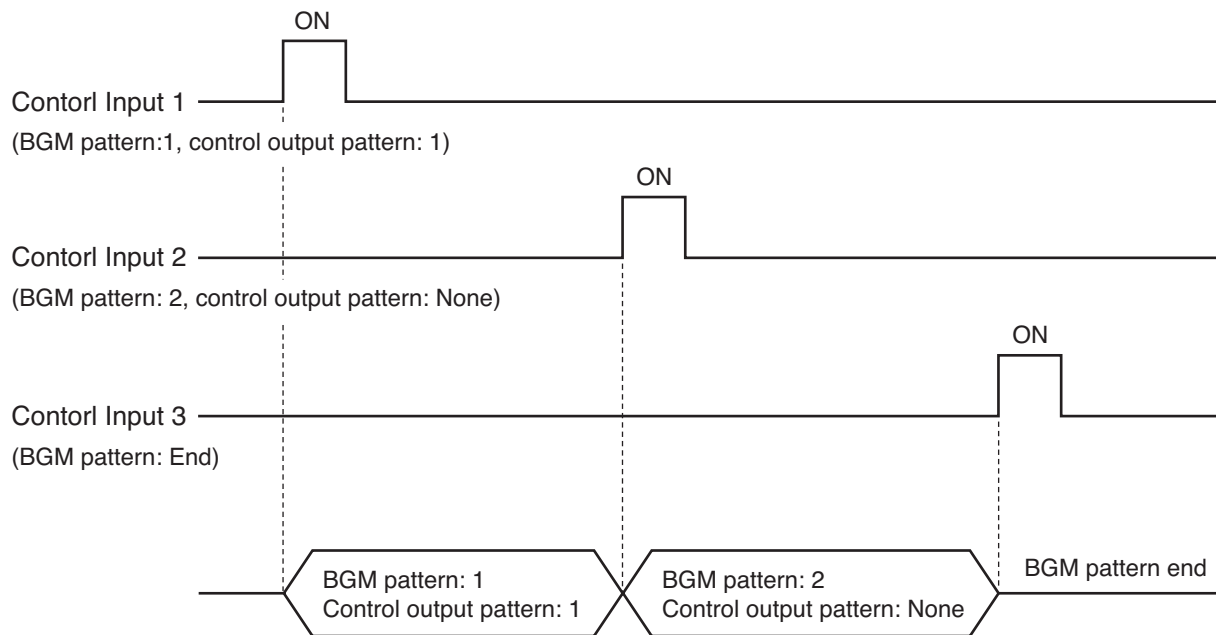
General-purpose patterns and control output patterns in the above example operate as follows:

- Example of general-purpose pattern operation  
General-purpose pattern 1 activated when control input 1 is ON continues until control input 1 turns OFF.  
General-purpose pattern 2 activated when control input 2 is ON continues until control input 2 turns OFF.
- Example of control output operation  
Control output pattern 1 activated when control input 1 is ON continues until control input 1 turns OFF.  
Control output pattern 2 activated when control input 2 is ON continues until control input 2 turns OFF.  
The state of control outputs overlapping in control output patterns 1 and 2 continues during the period from the time control input 1 turns ON until control input 2 turns OFF. (OR logic output)

\* Settings can be performed only for the control input of the SX-2000SM, SX-2100AI, SX-2000AO, SX-2100AO and SX-2000CI.

### 12.2.3. BGM pattern change/end

BGM pattern (control output pattern) broadcasts can be switched by control input\*.



Operation of the BGM pattern and the control output pattern in the above example is as follows:

- Example of BGM pattern operation  
BGM pattern 1 activated by Control Input 1 is switched to BGM pattern 2 by Control Input 2.
- Example of control output operation  
The state of the control output (control output assigned by Control Output Pattern 1) activated by Control Input 1 is turned OFF by "Control output pattern: None" activated by Control Input 2.

\* The timing chart also applies when BGM pattern broadcasts are changed by the function keys of the SX-2000AI, SX-2100AI, SX-2000AO, or SX-2100AO, or the function keys of the RM-200SF, RM-200S, RM-200SA, or RM-210.

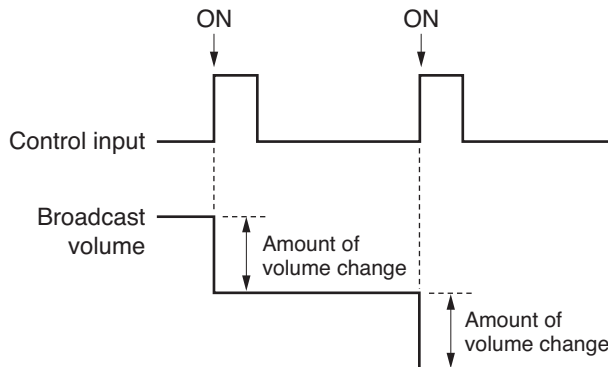
### 12.2.4. Control signal for adjusting volume

This function changes the volume of broadcasts currently in progress.  
Either a pulse or level signal can be selected as the signal to change the volume.

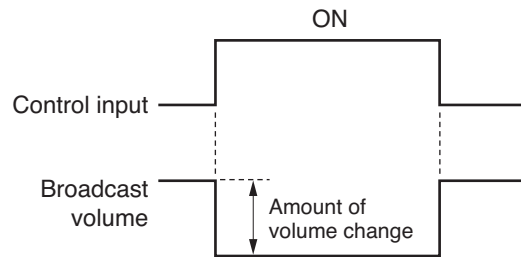
**Pulse signal:** Each time the control input is turned ON, the volume increases or decreases by the set amount.

**Level signal:** While the control terminal is ON, the volume is attenuated by the set amount. After the control input is turned OFF, the volume returns to the original level.

• Example of Pulse signal-operated volume change



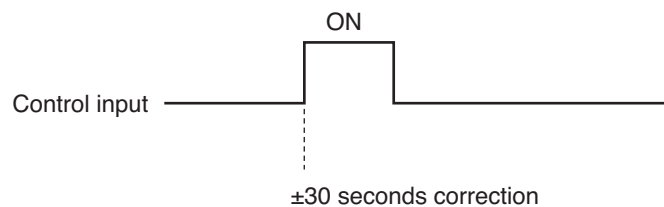
• Example of Level signal-operated volume change



### 12.2.5. Time adjustment

This function permits the system to receive time correction signal from a master or wave clock to correct the system's time in  $\pm 30$  seconds units.

The time correction is performed by the timing of a pulse rising edge.



Time is corrected as follows:

- When time is from 0 to 29 seconds, it is corrected to 0 second.  
(Example) When the SX-2000SM's time is 07:15:15, it is corrected to 07:15:00.
- When time is from 30 to 59 seconds, it is corrected to +1 minute, 0 second.  
(Example) When the SX-2000SM's time is 07:15:45, it is corrected to 07:16:00.

## 12.2.6. Emergency broadcast

Emergency broadcast pattern can be started or stopped, sequence phase can be shifted within the pattern, and emergency broadcast status can be reset to normal broadcast status via control input.

### [Setting Example]

Perform settings for each item as follows in advance.

#### • EV message settings

EV message 1		EV message 2		EV message 3	
Message name	Type	Message name	Type	Message name	Type
EV1	Alert	EV2	Evacuation	EV3	Alert

EV message 4		EV message 5	
Message name	Type	Message name	Type
EV4	Evacuation	EV5	Reset

#### • Emergency sequence settings

Emergency sequence 1	Phase 1	Phase 2	Phase 3
	EV message 1, 5-minute broadcast	EV message 2, Continuous broadcast	—

Emergency sequence 2	Phase 1	Phase 2	Phase 3
	EV message 3, 5-minute broadcast	EV message 4, Continuous broadcast	—

**Note:** Phase 3 is not set in this example.

#### • Emergency broadcast pattern settings

Emergency broadcast pattern 1	Emergency sequence 1	Phase 1	Phase 2	Phase 3
		EV message 1, 5-minute broadcast	EV message 2, Continuous broadcast	—
	Output zone	Output zone pattern 1	Output zone pattern 2	—
	Control output pattern	Control output pattern 1	Control output pattern 2	—

Emergency broadcast pattern 2	Emergency sequence 2	Phase 1	Phase 2	Phase 3
		EV message 3, 5-minute broadcast	EV message 4, Continuous broadcast	—
	Output zone	Output zone pattern 3	Output zone pattern 4	—
	Control output pattern	Control output pattern 3	Control output pattern 4	—

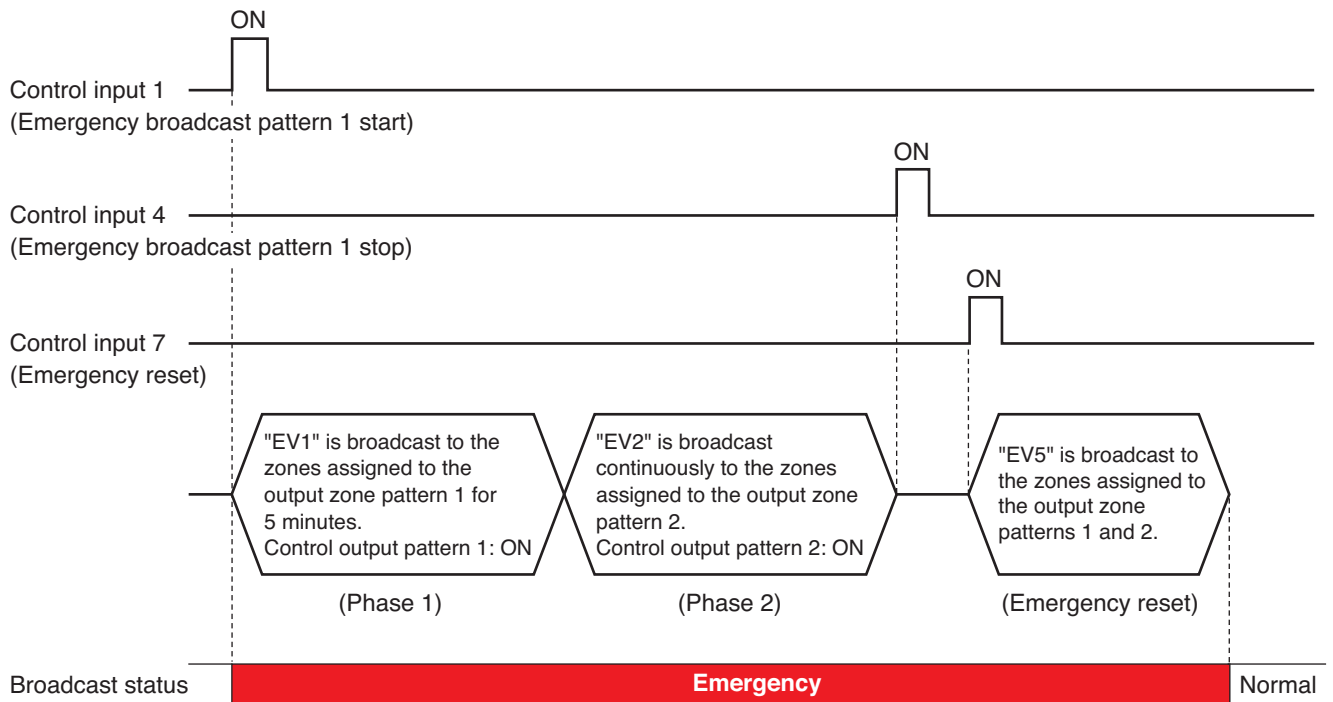
  

Emergency broadcast pattern 3	Emergency sequence 1	Phase 1	Phase 2	Phase 3
		EV message 1, 5-minute broadcast	EV message 2, Continuous broadcast	—
	Output zone	Output zone pattern 5	Output zone pattern 6	—
	Control output pattern	Control output pattern 5	Control output pattern 6	—

#### • Control input settings

- Control input 1: Emergency broadcast pattern 1 start
- Control input 2: Emergency broadcast pattern 2 start
- Control input 3: Emergency broadcast pattern 3 start
- Control input 4: Emergency broadcast pattern 1 stop
- Control input 5: Emergency sequence 1 phase shift
- Control input 6: Emergency sequence 1 stop
- Control input 7: Emergency reset (EV5 playback)

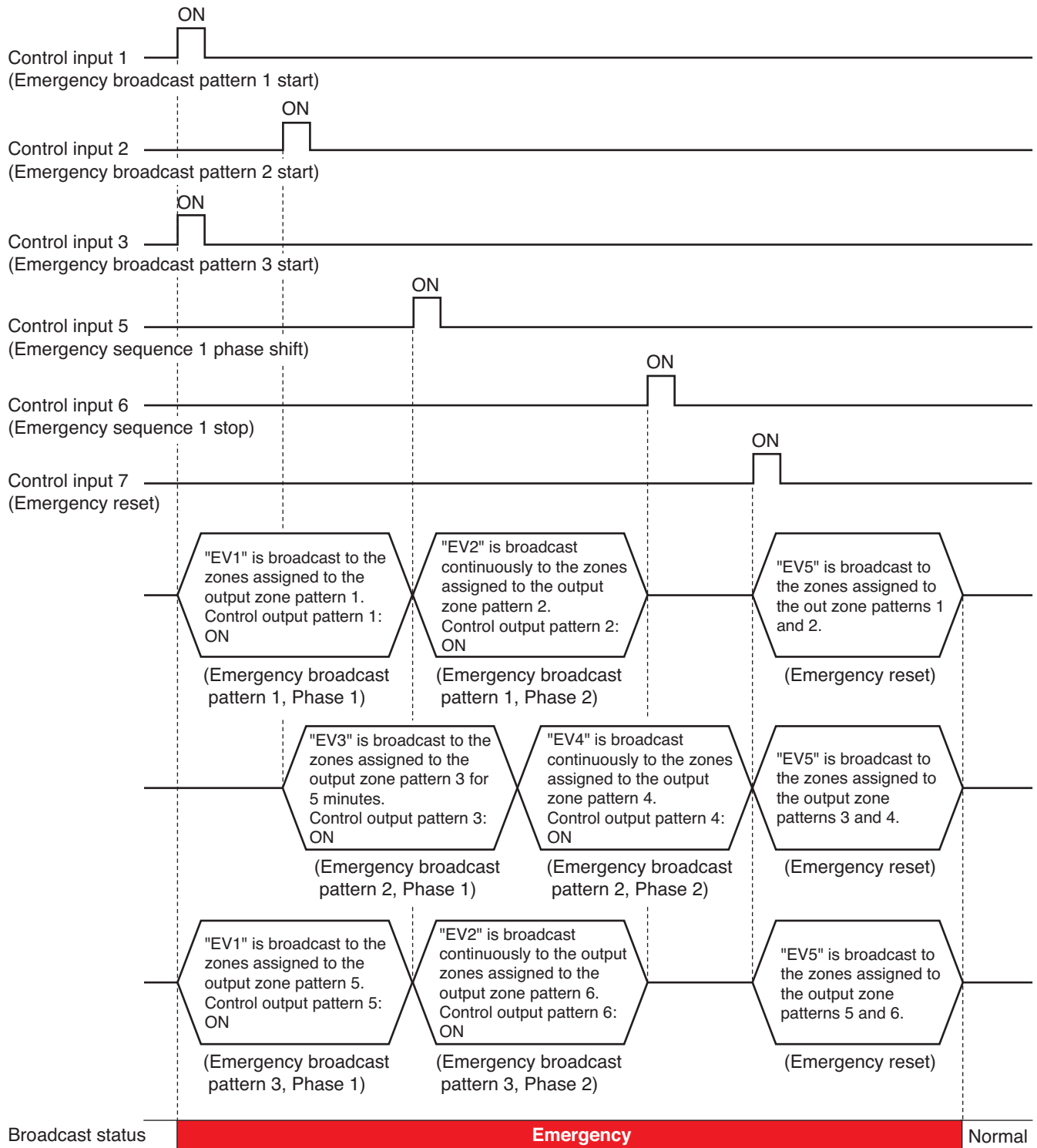
[Operation example 1]



Operations in this example are as follows.

- Phase 1 automatically shifts to Phase 2 when the preset time has elapsed.
- EV message "EV2" set to "Continuous broadcast" stops with the control input 4 ("Emergency broadcast pattern 1 stop" signal) or the control input 7 ("Emergency reset" signal).
- Emergency broadcast status continues even if the emergency broadcast pattern stops. It will return to normal broadcast status after Reset EV message is broadcast by the control input 7 ("Emergency Reset" signal).

[Operation example 2]



**Note**

When the zone output patterns in the phases of both emergency broadcast patterns 1, 2, and 3 include the same zone(s), the emergency broadcast pattern with higher-priority EV message has precedence if both broadcasts to the same zone(s) overlap.

Operations in this example are as follows.

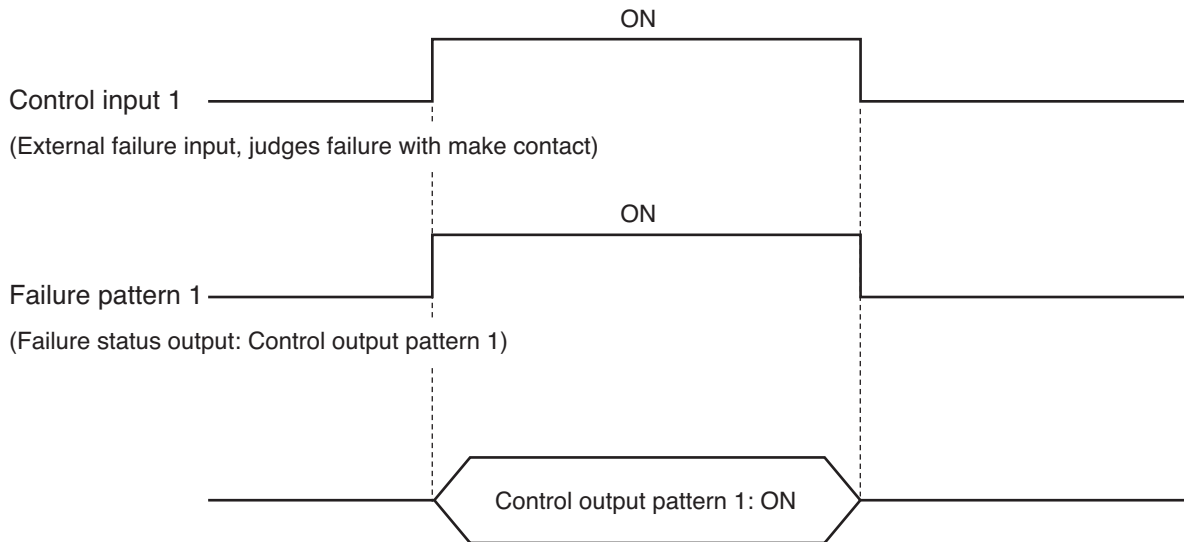
- Phase 1 shifts to Phase 2 with the control input 5 ("Emergency sequence 1 phase shift" signal) before the Phase 1 broadcast ends.
- All emergency broadcast patterns including the same Emergency sequence 1 stop with the control input 6 ("Emergency sequence 1 stop" signal).
- All emergency broadcast patterns stop with the control input 7 ("Emergency reset" signal). The status will return to normal broadcast status after Reset EV message is broadcast to all the zones where Emergency broadcast pattern was broadcast.



### 12.2.7. External failure input

Failure status of the external equipment can be accepted. Match the settings of the external failure input with type of a failure signal from the external equipment to "make" (close) or "break" (open). The failure pattern to which the external failure input is assigned is activated when an external failure signal is input.

**[Example when being "make" at the time of external equipment's failure]**



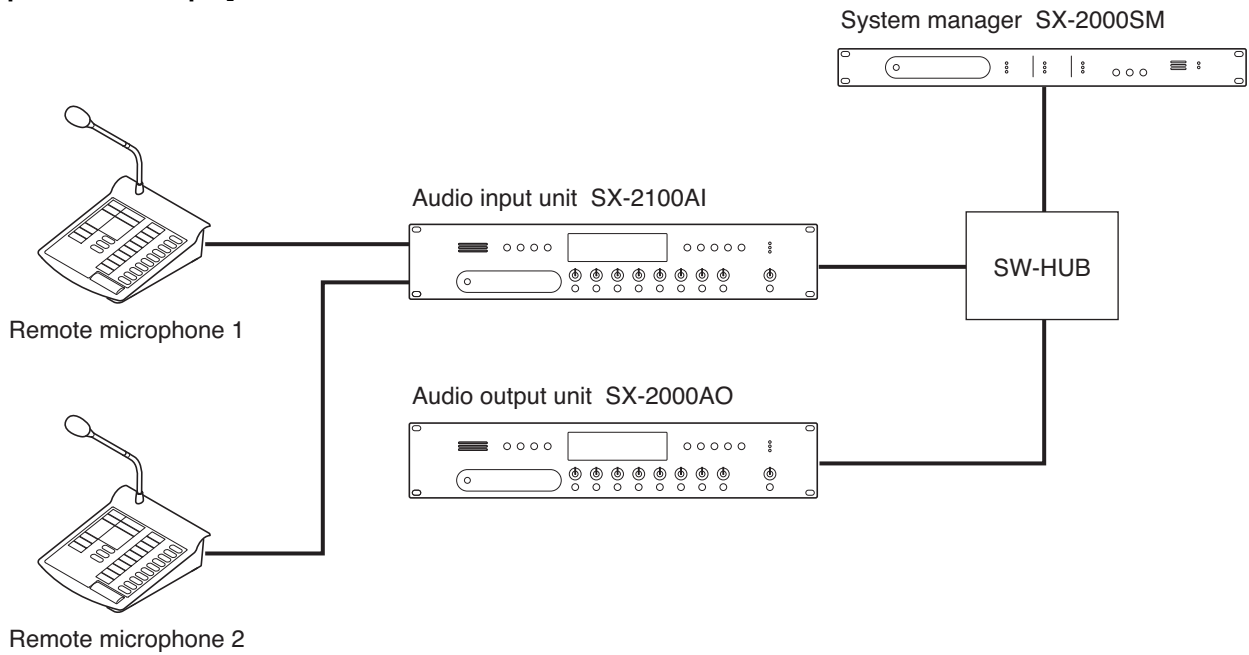
**Note**

As for which conditions lead the external device into fault status, refer to the manual enclosed with that device.

### 12.2.8. RM broadcast status

This function displays the current broadcast status of other remote microphones on the function key of the enabled remote microphone.

#### [Operation example]



In this example, Remote Microphone 1's broadcast status is set on Remote Microphone 2's Function key 1.

**RM event settings**    Name: Remote Mic2    AI-1 ID:2 Model:RM-200SA Type:General    [Paste]    [Copy]

---

Function key

	Name	Function	Contents
EMG	EMGKEY		
SYS1	SYSKEY1	-	
SYS2	SYSKEY2	-	
SYS3	SYSKEY3	-	
1	KEY1	RM broadcast status	Remote Mic1

Start Remote Microphone 1 broadcast.

The broadcast status indicator set for Remote Microphone 2's Function key 1 continues to light yellow while Remote Microphone 1 is broadcasting.



The broadcast status indicator on Remote Microphone 2 goes off after Remote Microphone 1 broadcast is completed.



### 12.2.9. General EV broadcasts

General EV messages can be broadcast over the desired zone(s) by pressing the remote microphone's function key.

When making general EV broadcasts from equipment other than the remote microphone, select "[Pattern Settings](#) → [General Broadcast Pattern Settings](#)" (p. 79) to create the general broadcast pattern using the general EV message, then assign the pattern to each function key or control input in the "[Event Settings](#)" (p. 87).

General EV broadcast operations change as follows depending on the "[Playback method settings](#)" (p. 49) selected by clicking "[System Settings](#) → [SX-2000SM](#)."

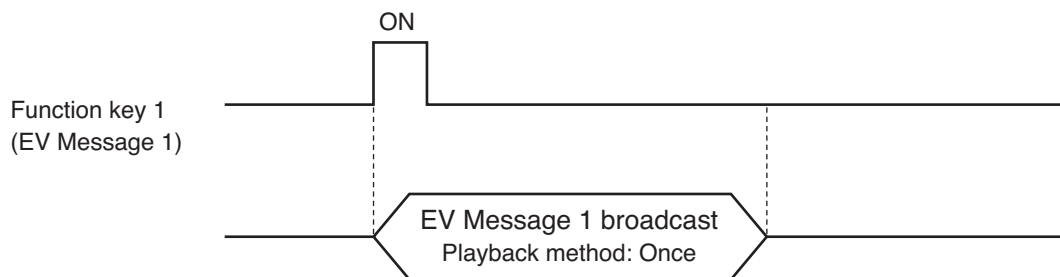
#### [EV message setting examples]

	Playback method
EV Message 1	Once
EV Message 2	Endless

- [EV Message 1: When the "Playback method" is set to "Once"](#)

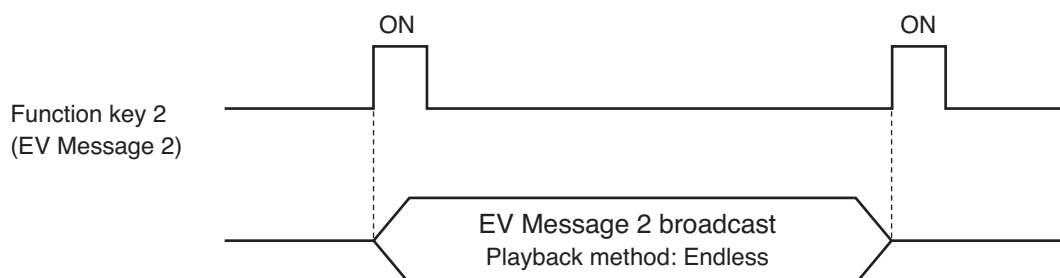
The EV message ends after being broadcast once.

Pressing the remote microphone's function key during EV message playback causes the general EV broadcast to end.



- [EV Message 2: When the "Playback method" is set to "Endless"](#)

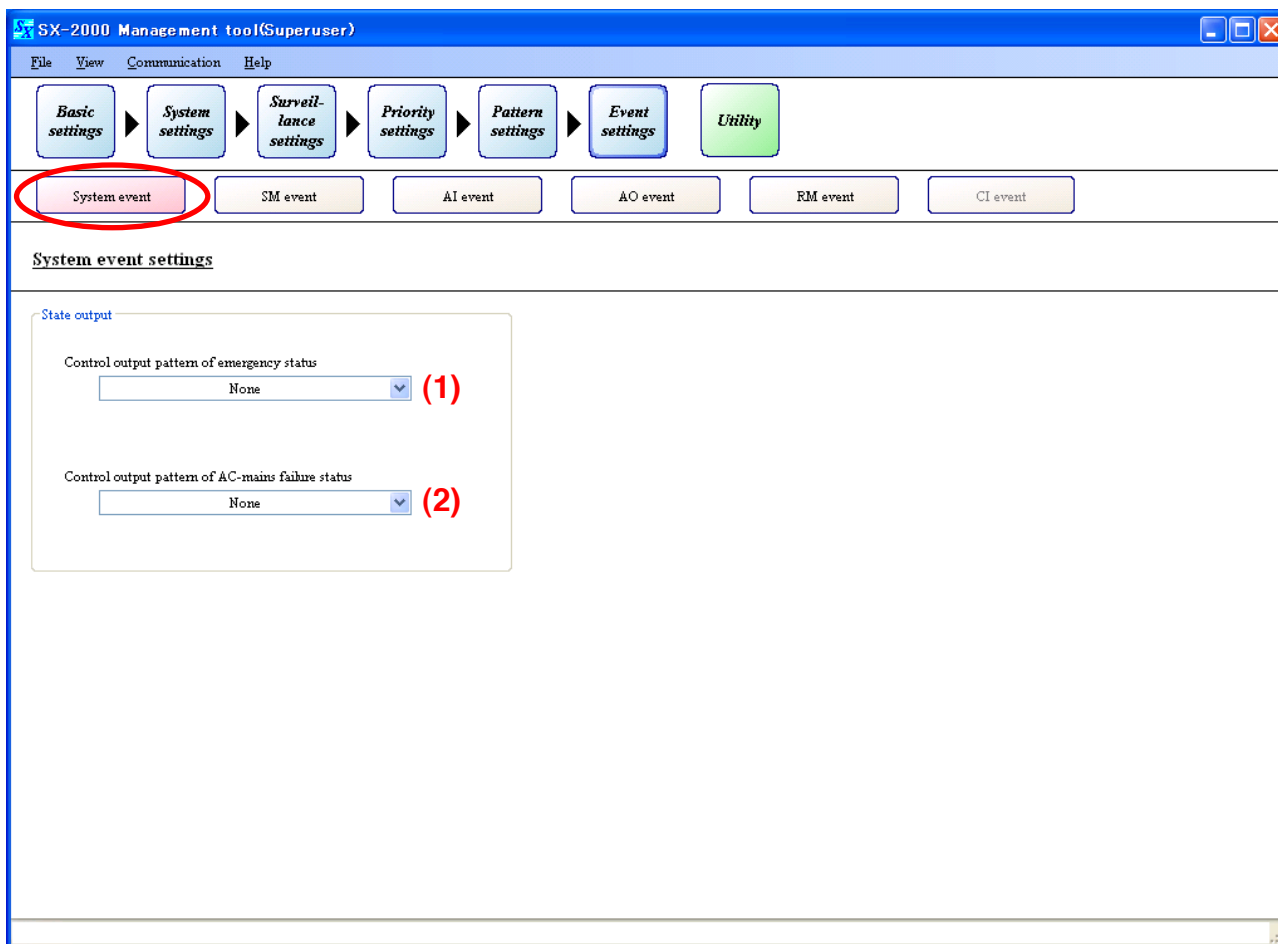
The general EV broadcast continues to play repeatedly until the remote microphone's function key is pressed.



## 12.3. System Event Settings

Set control output patterns in each state of the system.

Pressing the [System event] button on the Event Settings screen displays the System event settings screen.



### (1) Control output pattern of emergency status

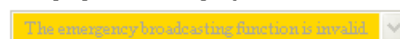
Select the control output pattern to be generated when the SX-2000 system is in an emergency broadcast condition.

Available Settings	None (default), Set Control Output Pattern
--------------------	--

#### Note

This function is available only when the Emergency broadcasting function is set to "Used" in the "Basic Settings."  
If "Not used" has been selected for the Emergency broadcasting function, the screen at right is displayed, and it is not possible to select the control output patterns.

Control output pattern of emergency



### (2) Control output pattern of AC-mains failure status

Select the control output pattern to be generated when the SX-2000 system is battery operated.

Available Settings	None (default), Set Control Output Pattern
--------------------	--

#### Note

This function is available only when the Surveillance function is set to "Used" in the "Basic Settings" (p. 29).  
If "Not used" has been selected for the Surveillance function, the screen at right is displayed, and it is not possible to select the control output patterns.

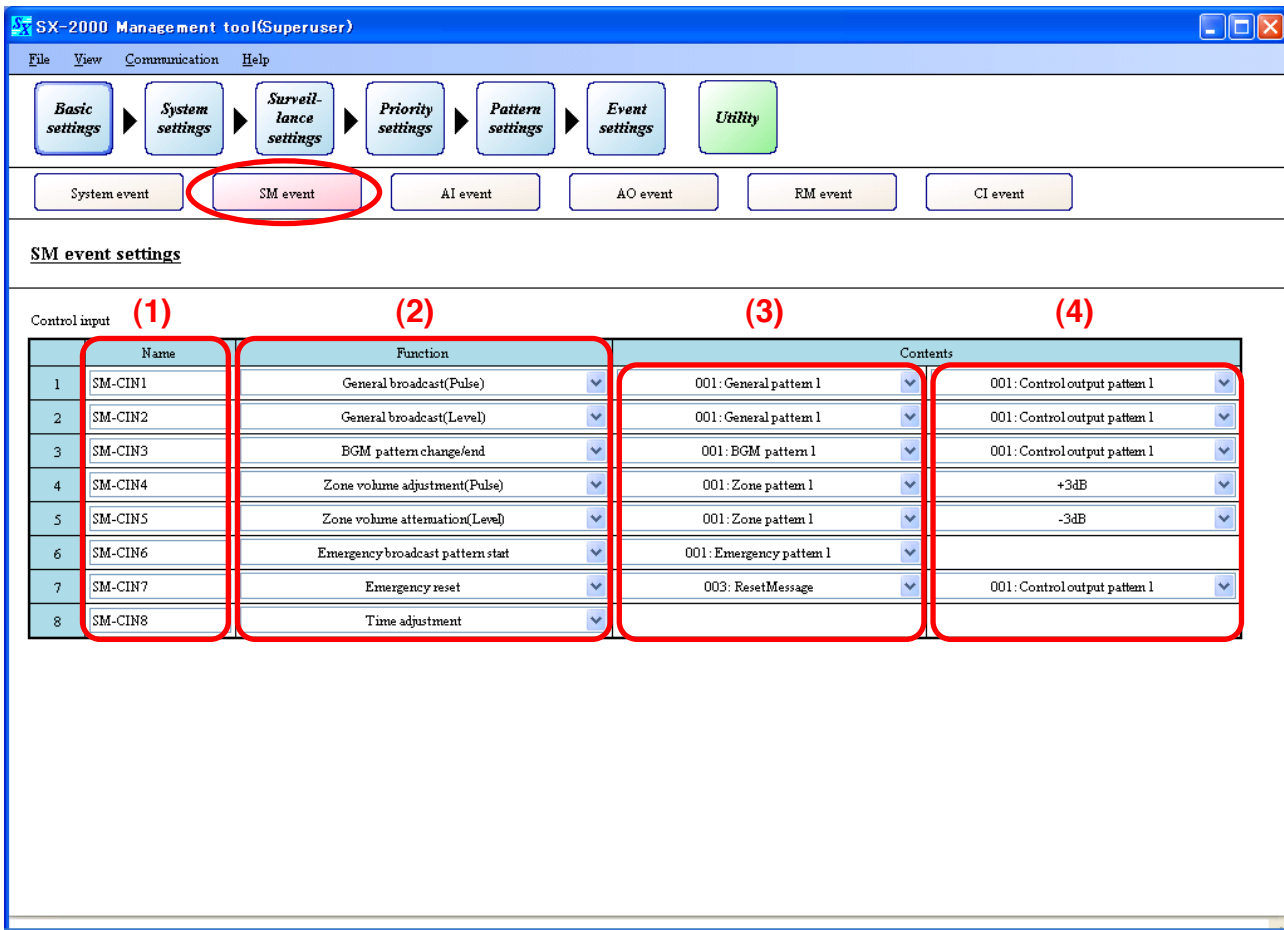
Control output pattern of power failure



## 12.4. SM Event Settings

Assign functions to the SX-2000SM's control inputs.

Clicking the [SM event] button on the Event Settings screen displays the SM event settings screen.



### (1) Name

Enter each name of the SX-2000SM's control inputs.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, SM-CIN1 represents the SX-2000SM's Control input No. 1.)
--------------------	--

### (2) Function

Select functions for the control inputs.

If the selected function needs particular settings, they are displayed on the "Contents."

Available Settings	<p>None (default), General broadcast (Pulse)*, General broadcast (Level)*, BGM pattern change/end*, Zone volume adjustment (Pulse)*, Zone volume attenuation (Level)*, Time adjustment</p> <p>* Corresponding patterns must be created in advance to select these items.</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>Following functions can be selected when the Emergency broadcasting function is set to "Used" in the "Basic Settings." <ul style="list-style-type: none"> <li>Emergency broadcast pattern start, Emergency broadcast pattern stop, Emergency sequence stop, Emergency sequence phase shift, Emergency reset</li> </ul> </li> <li>Following functions can be selected when the Surveillance function is set to "Used" in the "Basic Settings." <ul style="list-style-type: none"> <li>Failure output receipt, Failure output reset, External failure input</li> </ul> </li> </ul>
--------------------	--

[ If "General broadcast (Level)" is selected for "Function" ]

(3) Contents (left side)

Select the general broadcast pattern to be activated by the control input.  
Set the broadcast pattern using "Pattern settings → General broadcast pattern settings" (p. 79).  
Setting the broadcast pattern to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set general broadcast pattern
--------------------	---

(4) Contents (right side)

Select the control output pattern that operates in synchronization with the control input.  
Set the control output pattern using "Pattern settings → Control output pattern settings" (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

[ If "General broadcast (Pulse)" is selected for "Function" ]

(3) Contents (left side)

Select the general broadcast pattern to be activated by the control input.  
Set the broadcast pattern using "Pattern settings → General broadcast pattern settings" (p. 79).  
Setting the broadcast pattern to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set general broadcast pattern
--------------------	---

(4) Contents (right side)

Select the control output pattern that operates in synchronization with the control input.  
Set the control output pattern using "Pattern settings → Control output pattern settings" (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

[ If "BGM pattern change/end" is selected for "Function" ]

(3) Contents (left side)

Select the BGM broadcast pattern to be activated by the control input.  
Set the broadcast pattern using "Pattern settings → BGM pattern settings" (p. 78).  
If the broadcast pattern is set to "End," then it is not possible to set "Control output pattern" (next item).

Available Settings	End (default), Set BGM broadcast pattern
--------------------	--

(4) Contents (right side)

Select the control output pattern that operates in synchronization with the control input.  
Set the control output pattern using "Pattern settings → Control output pattern settings" (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[ If "Zone volume adjustment (Pulse)" is selected for "Function" ]**

**(3) Contents (left side)**

Select the output zone pattern of which sound volume is to be adjusted.  
If the output zone is set to "End," it is not possible to set "Volume level increment/decrement" (next item).

Available Settings	End (default), Set output zone pattern
--------------------	--

**(4) Contents (right side)**

Adjust the amount to increase or decrease the sound volume level of the output zone pattern.

Available Settings	0 dB (default), -10 to +10 dB (in 1-dB steps)
--------------------	---

**[ If "Zone volume attenuate (Level)" is selected for "Function" ]**

**(3) Contents (left side)**

Select the output zone pattern of which sound volume is to be attenuated.  
If the output zone is set to "End," it is not possible to set "Attenuation" (next item).

Available Settings	End (default), Set output zone pattern
--------------------	--

**(4) Contents (right side)**

Select the attenuation level.

Available Settings	-1 dB, -2 dB, -3 dB, -6 dB, -10 dB, -20 dB, (default), -40 dB, -infinity dB
--------------------	---

**[ If "Emergency broadcast pattern start" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency broadcast pattern to be activated by the control input.  
Set the emergency broadcast pattern using "[Pattern settings](#) → [Emergency broadcast pattern settings](#)" (p. 83).

Available Settings	None (default), Set emergency broadcast pattern
--------------------	---

**[ If "Emergency broadcast pattern stop" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency broadcast pattern to be stopped by the control input.  
Set the emergency broadcast pattern using "[Pattern settings](#) → [Emergency broadcast pattern settings](#)" (p. 83).

Available Settings	Set emergency broadcast pattern (default: Pattern 1)
--------------------	--

**[ If "Emergency sequence stop" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency sequence to be stopped by the control input.  
Set the emergency sequence using "[Pattern settings](#) → [Emergency sequence settings](#)" (p. 82).

Available Settings	Set emergency sequence (default: Sequence 1)
--------------------	--

[ If "Emergency sequence phase shift" is selected for "Function" ]

(3) Contents (left side)

Select the emergency sequence to be shifted to by the control input.

Set the emergency sequence using "Pattern settings → Emergency sequence settings" (p. 82).

Available Settings	Set emergency sequence (default: Sequence 1)
--------------------	--

[ If "Emergency reset" is selected for "Function" ]

(3) Contents (left side)

Select the EV message (Type: Reset) to be broadcast by the control input.

Set the EV message using "System settings → System Manager → EV Message" (p. 45).

Setting the EV message to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set emergency broadcast pattern
--------------------	---

(4) Contents (right side)

Select the control output pattern that operates in synchronization with the control input.

Set the control output pattern using "Pattern settings → Control output pattern settings" (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

[ If "External failure input" is selected for "Function" ]

(3) Contents (left side)

Select the type of contact input to judge to be a failure.

**Note**

Assigning this function to a control input terminal enables this terminal to be selected in the "External failure input" item on the "Failure output pattern settings" screen (p. 85).

Available Settings	Break (default), Make
--------------------	-----------------------



## 12.5. AI Event Settings

Assign functions to the Function keys, Channel keys, and control inputs of the SX-2100AI and SX-2000AI. Clicking the [AI event] button on the Event Settings screen displays the AI event settings screen.

The screenshot shows the 'AI event settings' screen in the SX-2000 Management tool. The 'AI event' button is circled in red. The screen displays three tables: Function key, Channel key, and Control input, each with columns for Name, Function, and Contents. Red annotations (1) through (5) highlight specific UI elements.

**(1) Unit number**

**(2) Paste and Copy buttons**

**(3) Function key**

	Name	Function	Contents	
1	AI1-FKEY1	General broadcast	001: General pattern 1	001: Control output pattern 1
2	AI1-FKEY2	BGM pattern change/end	001: BGM pattern 1	001: Control output pattern 1
3	AI1-FKEY3	BGM pattern change/end	End	
4	AI1-FKEY4	-		

**(4) Channel key**

	Name	Function	Contents	
1	AI1-CHKEY1	Channel ON/OFF		
2	AI1-CHKEY2	Channel ON/OFF		
3	AI1-CHKEY3	Channel ON/OFF		
4	AI1-CHKEY4	Channel ON/OFF		
5	AI1-CHKEY5	Channel ON/OFF		
6	AI1-CHKEY6	Channel ON/OFF		
7	AI1-CHKEY7	Channel ON/OFF		
8	AI1-CHKEY8	Channel ON/OFF		

**(5) Control input**

	Name	Function	Contents	
1	AI1-CIN1	General broadcast(Pulse)	001: General pattern 1	001: Control output pattern 1
2	AI1-CIN2	General broadcast(Level)	001: General pattern 1	001: Control output pattern 1
3	AI1-CIN3	BGM pattern change/end	001: BGM pattern 1	None
4	AI1-CIN4	BGM pattern change/end	End	
5	AI1-CIN5	-		
6	AI1-CIN6	-		
7	AI1-CIN7	Emergency broadcast pattern start	001: Emergency pattern 1	
8	AI1-CIN8	Emergency broadcast pattern stop	001: Emergency pattern 1	
9	AI1-CIN9	Emergency sequence stop	001: Emergency sequence 1	
10	AI1-CIN10	Emergency sequence phase shift	001: Emergency sequence 1	
11	AI1-CIN11	Emergency reset	None	
12	AI1-CIN12	Failure output receipt		
13	AI1-CIN13	Failure output reset		
14	AI1-CIN14	External failure input	Failure when turning it off	
15	AI1-CIN15	-		
16	AI1-CIN16	-		

### (1) Unit number

Click on the box, or press the arrow button to select the desired SX-2000AI or SX-2100AI.

### (2) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000AI or SX-2100AI selected by Unit number setting item (1).

### (3) Function key

Function key

	Name	Function	Contents	
1	AI1-FKEY1	General broadcast	001: General pattern 1	001: Control output pattern 1
2	AI1-FKEY2	BGM pattern change/end	001: BGM pattern 1	001: Control output pattern 1
3	AI1-FKEY3	BGM pattern change/end	End	
4	AI1-FKEY4	-		

#### • Name

Enter the names of the function keys on the SX-2000AI's or SX-2100AI's front panel.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, AI1-FKEY1 represents the Function key No. 1 of Unit No.1's SX-2000AI or SX2100AI.)
--------------------	--

#### • Function

Select functions to be assigned to the function keys on the SX-2000AI's or SX-2100AI's front panel. If the selected function needs particular settings, they are displayed on the "contents."

Available Settings	None (default), General broadcast, BGM pattern change/end
--------------------	---

#### [ If "General broadcast" is selected for "Function" ]

##### • Contents (left side)

Select the general broadcast pattern to be assigned to the function keys on the SX-2000AI's or SX-2100AI's front panel.

Set the broadcast pattern using ["Pattern settings" → "General broadcast pattern settings"](#) (p. 79).

Setting the broadcast pattern to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set general broadcast pattern
--------------------	---

##### • Contents (right side)

Select the control output that operates in synchronization with the function keys on the SX-2000AI's or SX-2100AI's front panel.

Set the control output pattern using ["Pattern settings" → "Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

#### [ If "BGM pattern change/end" is selected for "Function" ]

##### • Contents (left side)

Select the BGM broadcast pattern to be assigned to the function keys on the SX-2000AI's or SX-2100AI's front panel.

Set the BGM pattern using ["Pattern settings" → "BGM pattern settings"](#) (p. 78).

If the broadcast pattern is set to "End," then it is not possible to set "Control output pattern" (next item).

Available Settings	End (default), Set BGM broadcast pattern
--------------------	--

##### • Contents (right side)

Select the control output that operates in synchronization with the function keys on the SX-2000AI's or SX-2100AI's front panel.

Set the control output pattern using ["Pattern settings" → "Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

## (4) Channel key

Channel key

	Name	Function	Contents	
1	A11-CHKEY1	Channel ON/OFF		
2	A11-CHKEY2	Channel ON/OFF		
3	A11-CHKEY3	Channel ON/OFF		
4	A11-CHKEY4	Channel ON/OFF		
5	A11-CHKEY5	Channel ON/OFF		
6	A11-CHKEY6	Channel ON/OFF		
7	A11-CHKEY7	Channel ON/OFF		
8	A11-CHKEY8	Channel ON/OFF		

### • Name

Enter the names of the channel keys on the SX-2000AI's or SX-2100AI's front panel.

Available Settings	Up to 32 alphanumeric characters. (Default name, for example, A11-CHKEY1 represents the Channel key No.1 of Unit No.1's SX-2000AI or SX2100AI.)
--------------------	---

### • Function

Select functions to be assigned to the channel keys on the SX-2000AI's or SX-2100AI's front panel. If the selected function needs particular settings, they are displayed on the "contents."

Available Settings	None, General broadcast, Channel ON/OFF (default)
--------------------	---

### [ If "General broadcast" is selected for "Function" ]

#### • Contents (left side)

Select the general broadcast pattern to be assigned to the channel keys on the SX-2000AI's or SX-2100AI's front panel.

Set the broadcast pattern using ["Pattern settings → General broadcast pattern settings"](#) (p. 79).

Setting the broadcast pattern to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set general broadcast pattern
--------------------	---

#### • Contents (right side)

Select the control output that operates in synchronization with the channel keys on the SX-2000AI's or SX-2100AI's front panel.

Set the control output pattern using ["Pattern settings → Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

(5) Control input (SX-2100AI only)

Control input

	Name	Function	Contents	
1	A11-CIN1	General broadcast(Pulse)	001:General pattem 1	001:Control output pattem 1
2	A11-CIN2	General broadcast(Level)	001:General pattem 1	001:Control output pattem 1
3	A11-CIN3	BGM pattem change/end	001:BGM pattem 1	None
4	A11-CIN4	BGM pattem change/end	End	
5	A11-CIN5	-		
6	A11-CIN6	-		
7	A11-CIN7	Emergency broadcast pattem start	001:Emergency pattem 1	
8	A11-CIN8	Emergency broadcast pattem stop	001:Emergency pattem 1	
9	A11-CIN9	Emergency sequence stop	001:Emergency sequence 1	
10	A11-CIN10	Emergency sequence phase shift	001:Emergency sequence 1	
11	A11-CIN11	Emergency reset	None	
12	A11-CIN12	Failure output receipt		
13	A11-CIN13	Failure output reset		
14	A11-CIN14	External failure input	Failure when turning it off	
15	A11-CIN15	-		
16	A11-CIN16	-		

Set the functions to be assigned to the control inputs of the SX-2100AI.

The setting procedures are the same as those described in SM Event settings (Function allocations to the SX-2000SM's control inputs) on [p. 101](#).

But it is not possible to assign "Time adjustment" function to the control inputs.

## 12.6. AO Event Settings

Assign functions to the Function keys, Channel keys, and control inputs of the SX-2000AO and SX-2100AO, and local control inputs of the SX-2100AO.

Clicking the [AO event] button on the Event Settings screen displays the AO event settings screen.

**AO event settings** (1) Unit number: 1 Paste Copy (2)

**Function key** (3)

	Name	Function	Contents	
1	AO1-FKEY1	General broadcast	001: General pattern 1	001: Control output pattern 1
2	AO1-FKEY2	BGM pattern change/end	001: BGM pattern 1	001: Control output pattern 1
3	AO1-FKEY3	BGM pattern change/end	End	
4	AO1-FKEY4	-		

**Channel key** (4)

	Name	Function	Contents	
1	AO1-CHKEY1	Channel ON/OFF		
2	AO1-CHKEY2	Channel ON/OFF		
3	AO1-CHKEY3	Channel ON/OFF		
4	AO1-CHKEY4	Channel ON/OFF		
5	AO1-CHKEY5	Channel ON/OFF		
6	AO1-CHKEY6	Channel ON/OFF		
7	AO1-CHKEY7	Channel ON/OFF		
8	AO1-CHKEY8	Channel ON/OFF		

**Control input** (5)

	Name	Function	Contents	
1	AO1-CIN1	General broadcast(Pulse)	001: General pattern 1	001: Control output pattern 1
2	AO1-CIN2	General broadcast(Level)	001: General pattern 1	001: Control output pattern 1
3	AO1-CIN3	BGM pattern change/end	End	
4	AO1-CIN4	Emergency broadcast pattern start	001: Emergency pattern 1	
5	AO1-CIN5	Emergency reset	003: Message3	None
6	AO1-CIN6	Failure output receipt		
7	AO1-CIN7	Failure output reset		
8	AO1-CIN8	External failure input	Failure when turning it off	

**Local control input** (6)

	Name	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
1	AO1-LocalIn1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
2	AO1-LocalIn2	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8

### (1) Unit number

Click on the box, or press the right arrow button (increment) or left arrow button (decrement) to select the unit ID number.

### (2) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000AO or SX-2100AO selected by Unit number setting item (1).

### (3) Function key

Function key

	Name	Function	Contents	
1	AO1-FKEY1	General broadcast	001: General pattern 1	001: Control output pattern 1
2	AO1-FKEY2	BGM pattern change/end	001: BGM pattern 1	001: Control output pattern 1
3	AO1-FKEY3	BGM pattern change/end	End	
4	AO1-FKEY4	-		

Set the names and functions to be assigned to the function keys of the SX-2000AO or SX-2100AO. The setting procedures are the same as those described in AI Event settings (Function allocations to the Function keys on the SX-2000AI and SX-2100AI).

### (4) Channel key

Channel key

	Name	Function	Contents	
1	AO1-CHKEY1	Channel ON/OFF		
2	AO1-CHKEY2	Channel ON/OFF		
3	AO1-CHKEY3	Channel ON/OFF		
4	AO1-CHKEY4	Channel ON/OFF		
5	AO1-CHKEY5	Channel ON/OFF		
6	AO1-CHKEY6	Channel ON/OFF		
7	AO1-CHKEY7	Channel ON/OFF		
8	AO1-CHKEY8	Channel ON/OFF		

Set the names and functions to be assigned to the channel keys of the SX-2000AO or SX-2100AO. The setting procedures are the same as those described in AI Event settings (Function allocations to the Channel keys on the SX-2000AI and SX-2100AI).

### (5) Control input

Control input

	Name	Function	Contents	
1	AO1-CIN1	General broadcast(Pulse)	001: General pattern 1	001: Control output pattern 1
2	AO1-CIN2	General broadcast(Level)	001: General pattern 1	001: Control output pattern 1
3	AO1-CIN3	BGM pattern change/end	End	
4	AO1-CIN4	Emergency broadcast pattern start	001: Emergency pattern 1	
5	AO1-CIN5	Emergency reset	003: Alarm Message 1	None
6	AO1-CIN6	Failure output receipt		
7	AO1-CIN7	Failure output reset		
8	AO1-CIN8	External failure input	Failure when turning it off	

Set the names and functions to be assigned to the control inputs of the SX-2000AO or SX-2100AO. The setting procedures are the same as those described in SM Event settings (Function allocations to the control inputs of the SX-2000SM). But it is not possible to assign "Time adjustment" function to the control inputs.

**(6) Local control input (SX-2100AO only)**

Local control input

	Name	Zone1	Zone2	Zone3	Zone4	Zone5	Zone6	Zone7	Zone8
1	AO1-LocalIn1	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8
2	AO1-LocalIn2	AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8

• **Checkboxes for zones used**

Click the buttons corresponding to the zones to use.

Local Input 1 priority is set to be higher than Local Input 2 and lower than BGM and general broadcast sound sources. Making an emergency broadcast over part of the zones used for local broadcast finishes the local broadcast in the entire zone.

Available Settings	Colored (selected), Colorless (not selected, default)
--------------------	---

## 12.7. RM Event Settings

Set the functions to be assigned to the Covered keys and Function keys on the RM-200SF, RM-200S, and RM-200SA, and the Function keys on RM-210.

Clicking the [RM event] button on the Event Settings screen displays the RM event settings screen.

The screenshot shows the 'RM event settings' screen in the SX-2000 Management tool. The 'RM event' button is circled in red. The screen displays a table of function keys and their settings. The table has columns for Name, Function, and Contents. The 'Name' column is circled in red and labeled (1). The 'Copy' button is circled in red and labeled (2).

	Name	Function	Contents
EMG	EMGKEY	Emergency broadcast pattern start	001: Emergency pattern 1
SYS1	SYSKEY1	General broadcast	001: General pattern 1
SYS2	SYSKEY2	BGM pattern change/end	001: BGM pattern 1
SYS3	SYSKEY3	BGM pattern change/end	End
1	KEY1	Zone selection(Pattern)	None
2	KEY2	Zone selection(Individual)	AO1-ZONE1
3	KEY3	Zone selection(Individual)	AO1-ZONE2
4	KEY4	Zone selection clear	
5	KEY5	General EV message start/end	004: sign0001
6	KEY6	RM broadcast status	AI1-RM1
7	KEY7	Emergency reset	None
8	KEY8	-	
9	KEY9	Failure output reset	
10	KEY10	Lamp test	

### (1) Unit name

Click on the box or press the arrow button to select the desired RM-200SF, RM-200S, or RM-200SA. Function keys of the RM-210 are also displayed on the screen when the remote microphone to which the RM-210 is connected is selected.

See "System Settings → RM-200SF, RM-200S, and RM-200SA → Number of RM-210 units" on p. 56 and p. 60.

### (2) Copy and Paste buttons

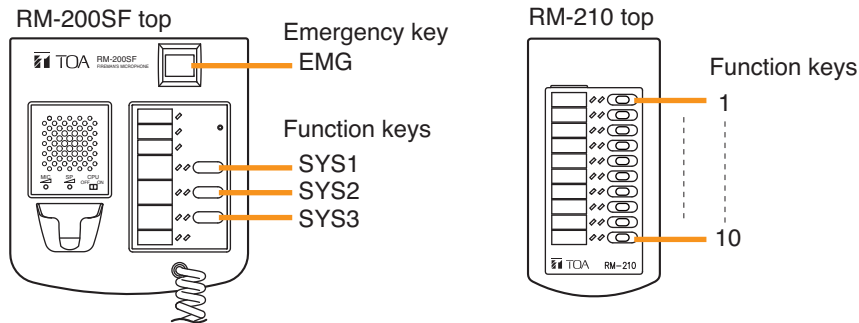
Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other RM-200SF, RM-200S, or RM-200SA selected by Unit number setting item (1).



### 12.7.1. RM-200SF

When the remote microphone selected from the "Name" pull-down menu is the RM-200SF, its setting screen below is displayed.

Function key	(1)	(2)	(3)	(4)
	Name	Function	Contents	
EMG	EMGKEY	Emergency broadcast pattern start	001: Emergency pattern 1	
SYS1	SYSKEY1	Emergency broadcast pattern stop	001: Emergency pattern 1	
SYS2	SYSKEY2	Emergency sequence phase shift	001: Emergency sequence 1	
SYS3	SYSKEY3	Emergency reset	002: sign0003	001: Control output pattern 1



#### (1) Name

Enter the names of the keys of the RM-200SF and RM-210.

Available Settings	Up to 32 alphanumeric characters. (default: EMGKEY for the Emergency key, SYSKEY 1 – 3 for the Function keys)
--------------------	---

#### (2) Function

Select functions to be assigned to the keys of the RM-200SF and RM-210.

If the selected function needs particular settings, they are displayed on the "Contents."

Available Settings	<p>None (default), Zone selection (Pattern), Zone selection (Individual), Zone selection clear, BGM pattern change/end*, General broadcast*, RM broadcast status, Lamp test</p> <p>* Corresponding patterns must be created in advance to select these items.</p> <ul style="list-style-type: none"> <li>• If the "Type" of the sound source registered in the System Manager of <b>"System Settings"</b> (p. 44) is set to "General," the following functions can be selected. <ul style="list-style-type: none"> <li>General EV message start/end</li> </ul> </li> <li>• Following functions can be selected when the "Emergency broadcasting function" has been set to "Used" in the "Basic Settings." <ul style="list-style-type: none"> <li>Emergency broadcast pattern start, Emergency broadcast pattern stop, Emergency sequence stop, Emergency sequence phase shift, Emergency reset</li> </ul> </li> <li>• Following functions can also be selected when the Surveillance function has been set to "Used" in the "Basic Settings." <ul style="list-style-type: none"> <li>Failure output receipt, Failure output reset</li> </ul> </li> </ul>
--------------------	--

**Note:** Only the "Emergency broadcast pattern start" function can be assigned to the Emergency key ("EMGKEY").

**[If Zone selection (Pattern) is selected for "Function"]**

**(3) Contents (left side)**

Select the output zone pattern to be assigned to the keys on the RM-200SF or RM-210.  
Set the output pattern using ["Pattern settings → Output zone pattern settings"](#) (p. 77).  
If the output zone pattern is set to "None," then it is not possible to set "Control output pattern" (next item).

Available Settings	None (default), Set output zone pattern
--------------------	---

**(4) Contents (right side)**

Select the control output pattern that operates in synchronization with the function keys on the RM-200SF or RM-210.  
Set the control output pattern using ["Pattern settings → Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[If Zone selection (Individual) is selected for "Function"]**

**(3) Contents (left side)**

Select the output zone (individual) to be assigned to the keys on the RM-200SF or RM-210.  
Set the output zone using ["System settings → Audio output unit"](#) (p. 61).  
If the output zone (individual) is set to "None," then it is not possible to set "Control output pattern" (next item).

Available Settings	None (default), Set output zone (individual)
--------------------	--

**(4) Contents (right side)**

Select the control output pattern that operates in synchronization with the keys on the RM-200SF or RM-210.  
Set the control output pattern using ["Pattern settings → Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[If "General broadcast" is selected for "Function" ]**

**(3) Contents (left side)**

Select the general broadcast pattern to be assigned to the keys on the RM-200SF or RM-210.  
Set the broadcast pattern using ["Pattern settings → General broadcast pattern settings"](#) (p. 79).  
Setting the broadcast pattern to "None" and "Control output pattern" (next item) permits only the control output to be operated in synchronization with the control input.

Available Settings	None (default), Set general broadcast pattern
--------------------	---

**(4) Contents (right side)**

Select the control output that operates in synchronization with the keys on the RM-200SF or RM-210.  
Set the control output pattern using ["Pattern settings → Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[If "BGM pattern change/end" is selected for "Function" ]**

**(3) Contents (left side)**

Select the BGM broadcast pattern to be assigned to the keys on the RM-200SF or RM-210.  
Set the BGM pattern using ["Pattern settings" → "BGM pattern settings"](#) (p. 78).  
If the broadcast pattern is set to "End," then it is not possible to set "Control output pattern" (next item).

Available Settings	End (default), Set BGM broadcast pattern
--------------------	--

**(4) Contents (right side)**

Select the control output that operates in synchronization with the keys on the RM-200SF or RM-210.  
Set the control output pattern using ["Pattern settings" → "Control output pattern settings"](#) (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[If "RM broadcast status" is selected for "Function" ]**

**(3) Contents (left side)**

Set the RM-200SF or RM-210 remote microphone function keys to select which remote microphone broadcast conditions to monitor. When a broadcast is in progress at the selected remote microphone, the broadcast status indicator corresponding to the function key lights.

Available Settings	Set remote microphone (Default: the lowest unit number remote microphone connected to the lowest unit number SX-2000AI or SX-2100AI).
--------------------	---

**[If "General EV message start/end" is selected for "Function" ]**

**(3) Contents (left side)**

Select the general EV message to be activated with RM-200SF or RM-210 key operation.  
Use the ["System settings" → "SX-2000SM"](#) (p. 46 ["Registering sound sources"](#)) to register the general EV message.  
Settings cannot be performed unless the general EV message has been registered.

Available Settings	Set general EV message (Default: the lowest sound source number message of all set general EV messages)
--------------------	---

**[If "Emergency broadcast pattern start" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency broadcast pattern to be activated by the keys on the RM-200SF or RM-210.  
Set the emergency broadcast pattern using ["Pattern settings" → "Emergency broadcast pattern settings"](#) (p. 83).

Available Settings	None (default), Set emergency broadcast pattern
--------------------	---

**[If "Emergency broadcast pattern stop" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency broadcast pattern to be stopped by the keys on the RM-200SF or RM-210.  
Set the emergency broadcast pattern using ["Pattern settings" → "Emergency broadcast pattern settings"](#) (p. 83).

Available Settings	Set emergency broadcast pattern (default: Pattern 1)
--------------------	--

**[If "Emergency sequence stop" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency sequence to be stopped by the keys on the RM-200SF or RM-210.  
Set the emergency sequence using "[Pattern settings](#) → [Emergency sequence settings](#)" (p. 82).

Available Settings	Set emergency sequence (default: Sequence 1)
--------------------	--

**[If "Emergency sequence phase shift" is selected for "Function" ]**

**(3) Contents (left side)**

Select the emergency sequence to be shifted to by the keys on the RM-200SF or RM-210.  
Set the emergency sequence using "[Pattern settings](#) → [Emergency sequence settings](#)" (p. 82).

Available Settings	Set emergency sequence (default: Sequence 1)
--------------------	--

**[If "Emergency reset" is selected for "Function" ]**

**(3) Contents (left side)**

Select the EV message (Type: Reset) to be broadcast by the keys on the RM-200SF or RM-210.  
Set the EV message using "[System settings](#) → [System Manager](#) → [EV Message](#)" (p. 45).  
If the EV message is set to "None," it is not possible to set "Control output pattern" (next item).

Available Settings	None (default), Set EV message
--------------------	--------------------------------

**(4) Contents (right side)**

Select the control output pattern that operates in synchronization with the keys on the RM-200SF or RM-210.  
Set the control output pattern using "[Pattern settings](#) → [Control output pattern settings](#)" (p. 81).

Available Settings	None (default), Set control output pattern
--------------------	--

**[If "Failure output receipt" is selected for "Function" ]**

**(3) Contents (left side)**

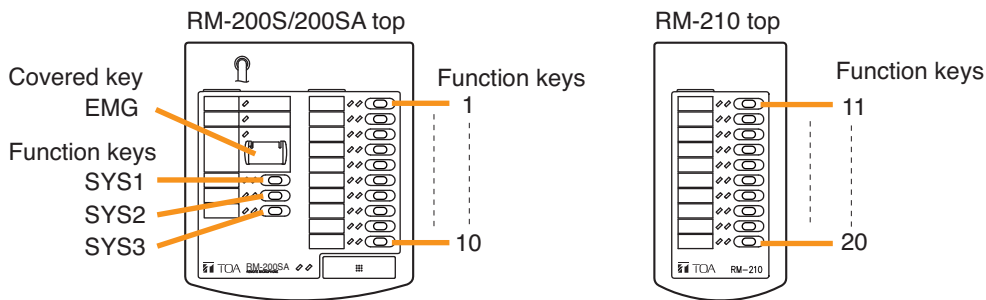
Select the failure output pattern to be assigned to the keys on the RM-200SF or RM-210.  
Set the failure output pattern using "[Pattern settings](#) → [Failure output pattern settings](#)" (p. 85).

Available Settings	Set failure output pattern (default: Failure output pattern 1)
--------------------	--

### 12.7.2. RM-200S, RM-200SA

When the remote microphone selected from the "Name" pull-down menu is the RM-200S or RM-200SA, its setting screen below is displayed.

Function key	(1)	(2)	(3)	(4)
	Name	Function	Contents	
EMG	EMGKEY	Emergency broadcast pattern start	001: Emergency pattern 1	
SYS1	SYSKEY1	General broadcast	001: General pattern 1	001: Control output pattern 1
SYS2	SYSKEY2	BGM pattern change/end	001: BGM pattern 1	001: Control output pattern 1
SYS3	SYSKEY3	BGM pattern change/end	End	
1	KEY1	Zone selection(Pattern)	None	
2	KEY2	Zone selection(Individual)	A01-ZONE1	None
3	KEY3	Zone selection(Individual)	A01-ZONE2	None
4	KEY4	Zone selection clear		
5	KEY5	General EV message start/end	004: sign0001	
6	KEY6	RM broadcast status	A11-RM1	
7	KEY7	Emergency reset	None	
8	KEY8	Failure output receipt	001: Failure output pattern 1	
9	KEY9	Failure output reset		
10	KEY10	Lamp test		



#### (1) Name

Set the names of the keys of the RM-200S, RM-200SA, and RM-210.

Available Settings	Up to 32 alphanumeric characters. (default: EMGKEY for the Covered key, SYSKEY 1 – 3 for the Function keys on the left, KEY 1 – 10 for the Function keys on the right)
--------------------	--

**(2) Function**

Select functions to be assigned to the Covered key and Function keys on the RM-200S and RM-200SA, and the Function keys on RM-210\*.  
If the selected function needs particular settings, they are displayed on the "Contents."

\* Assignable functions to the RM-210 differ depending on the type of remote microphone the RM-210 is connected to. The same functions as those assigned to the remote microphone (RM-200SA or RM-200S) can be assigned to the RM-210.

Available Settings	<p>None (default), Zone selection (Pattern), Zone selection (Individual), Zone selection clear, BGM pattern change/end*<sup>1</sup>, General broadcast*<sup>1</sup>, RM broadcast status, Lamp test*<sup>2</sup></p> <p>*<sup>1</sup> Corresponding patterns must be created in advance to select these items. *<sup>2</sup> RM-200SA only</p> <ul style="list-style-type: none"> <li>• Following functions are available when the emergency broadcasting function is set to "Used" in the "Basic Settings" and the type of RM-200SA set to "Emergency/General" in the "System Settings." Emergency broadcast pattern start, Emergency broadcast pattern stop, Emergency sequence stop, Emergency sequence phase shift, Emergency reset</li> <li>• Following function can also be selected when the Surveillance function has been set to "Used" in the "Basic Settings." Failure output receipt, Failure output reset</li> </ul>
--------------------	---

**Notes**

- Only the "Emergency broadcast pattern start" function can be assigned to the covered key.
- Pressing the covered key allows the General urgency all-call broadcast (All zone broadcast by way of analog transmission not via the Software control) to be made regardless of whether the function of the covered key is set to "None" or "Emergency broadcast pattern start" on this Setting Software. For details, refer to the separate Operation Manual, "Making General Urgency All-calls."
- The setting procedures for the Function (2) and contents (3) and (4) are the same as those described on RM-200SF settings (p. 113).

## 12.8. CI Event Settings

Assign functions to the SX-2000CI's control inputs.

Clicking the [CI event] button on the Event Setting screen displays the CI event settings screen.

**CI event settings** (1) Name: AO1-CI1 AO-1 ID:1 Paste Copy (3)

Control input (2)

	Name	Function	Contents	
1	AO1-CI-1	General broadcast(Pulse)	001: General pattem 1	001: Control output pattem 1
2	AO1-CI-2	General broadcast(Level)	001: General pattem 1	001: Control output pattem 1
3	AO1-CI-3	BGM pattern change/end	001: BGM pattern 1	001: Control output pattem 1
4	AO1-CI-4	BGM pattern change/end	End	
5	AO1-CI-5	-		
6	AO1-CI-6	-		
7	AO1-CI-7	Emergency broadcast pattern start	001: Emergency pattem 1	
8	AO1-CI-8	Emergency broadcast pattern stop	001: Emergency pattem 1	
9	AO1-CI-9	Emergency sequence stop	001: Emergency sequence 1	
10	AO1-CI-10	Emergency sequence phase shift	001: Emergency sequence 1	
11	AO1-CI-11	Emergency reset	None	
12	AO1-CI-12	Failure output receipt		
13	AO1-CI-13	Failure output reset		
14	AO1-CI-14	External failure input	Failure when turning it off	
15	AO1-CI-15	-		
16	AO1-CI-16	-		
17	AO1-CI-17	-		
18	AO1-CI-18	-		
19	AO1-CI-19	-		
20	AO1-CI-20	-		

### (1) Name

Click on the box or press the arrow button to selects the desired SX-2000CI's name.

### (2) Control input

The setting procedures are the same as those described in SM Event settings (Function allocations to the SX-2000SM's control inputs.).

But it is not possible to assign "Time adjustment" function to the control inputs.

### (3) Copy and Paste buttons

Pressing the [Copy] button copies all of the on-screen settings except the names preset by default. Pressing the [Paste] button pastes the copied parameters in the same setting screen of other SX-2000CI selected by Name (1).

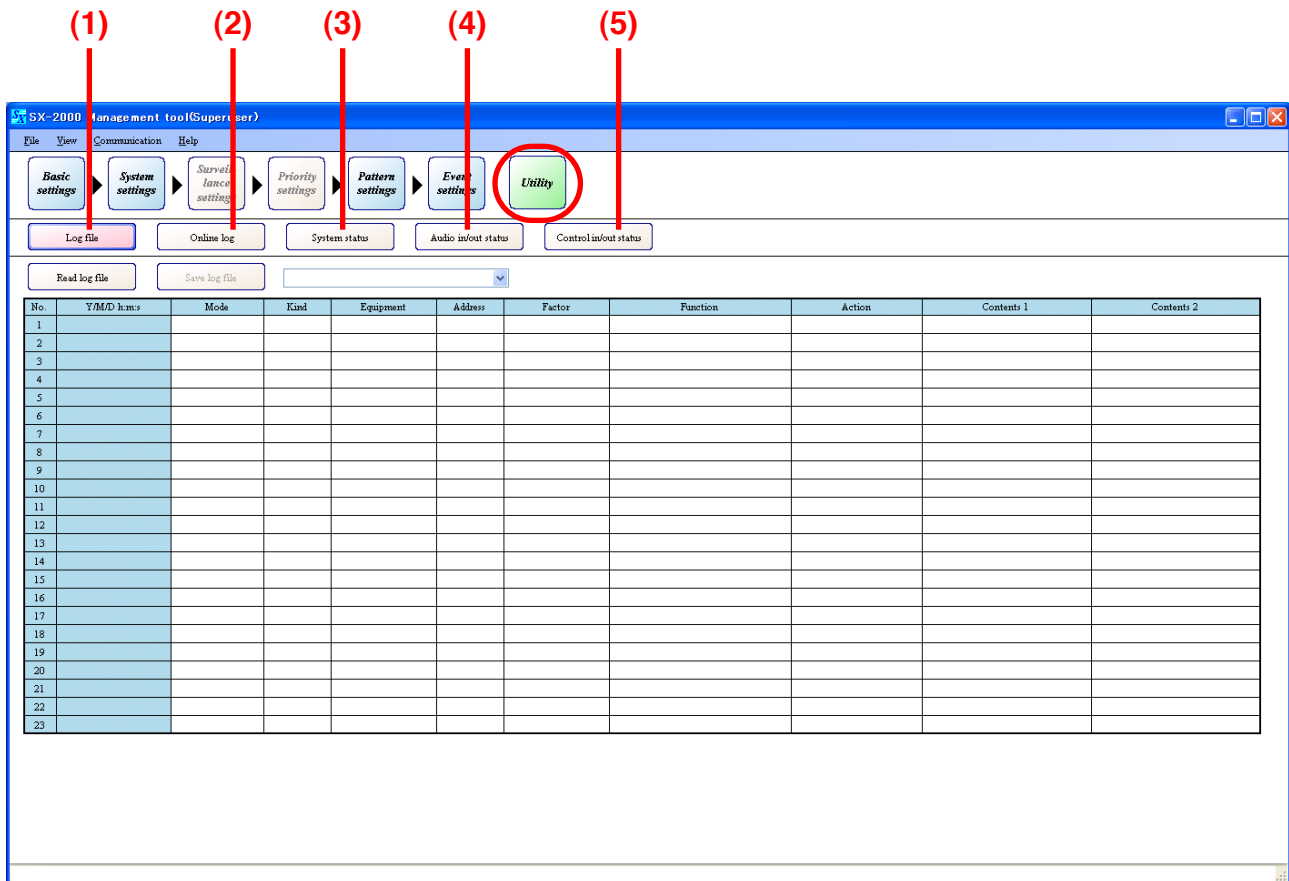
## 13. UTILITY

Clicking the menu item [Utility] button displays the Utility screen.

Not only does this screen allow logs to be acquired online, it can also display the following: log files, system status, audio input and output statuses, and control input and output statuses.

### Note

To carry out functions other than log file displays, communications must be established between the SX-2000SM and the PC in advance. For details, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."



Pressing each button (1 – 5) displays the corresponding setting screen.

#### (1) Log file button

Displays the CF card's log status and outputs log data. (Refer to p. 121)

#### (2) Online log button

Displays log data online. (Refer to p. 125)

#### (3) System status button

Displays system configuration or failure status online. (Refer to p. 128)

#### (4) Audio in/out status button

Displays audio input and output status online. (Refer to p. 147)

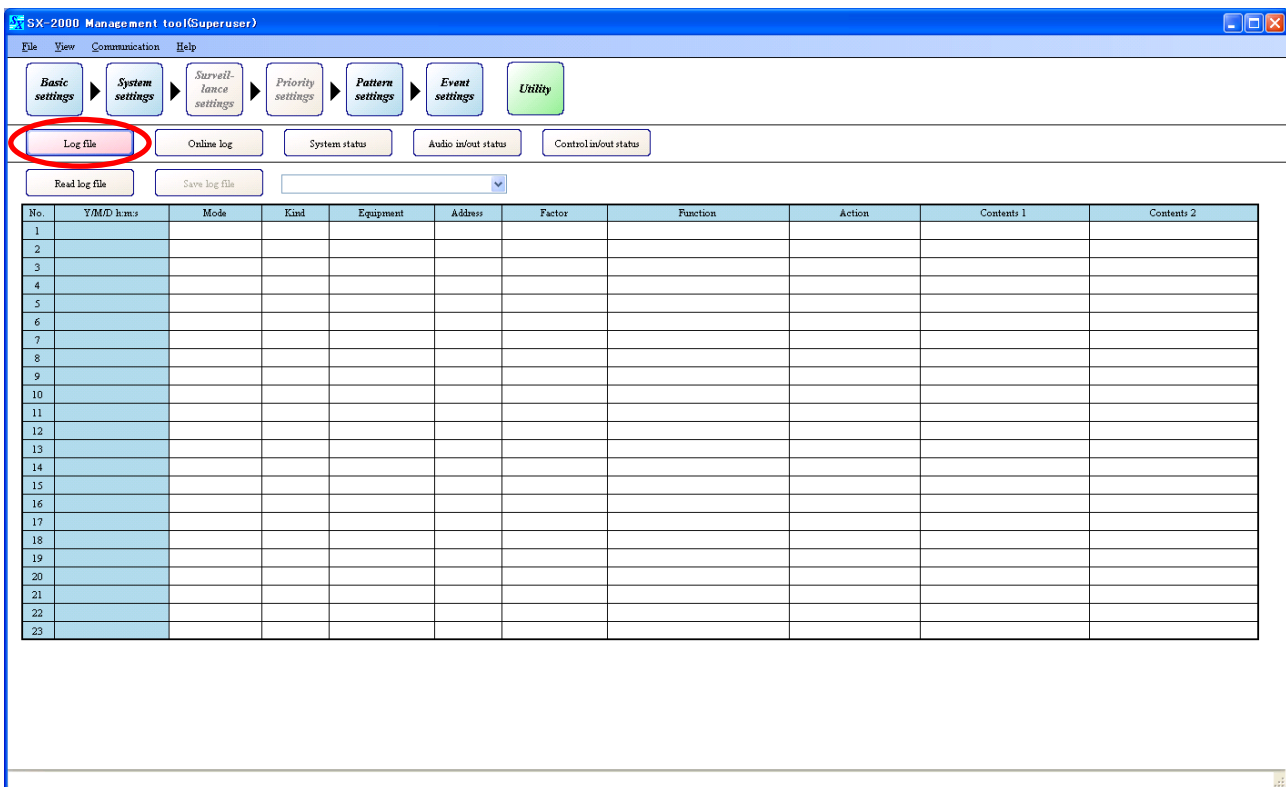
#### (5) Control in/out status button

Displays control input and output status online. (Refer to p. 151)



## 13.1. Log File Display

Pressing the [Log file] button on the Utility screen displays the log file screen.



SX-2000 system's operation logs can be saved to a CF card in the ".s2l" file format and such saved logs can be displayed using the Setting Software. It is also possible to output the displayed log data in the form of an Excel CSV file.

There are two types of log data: Operation log data that include all logs and Failure log data that include only failure logs.

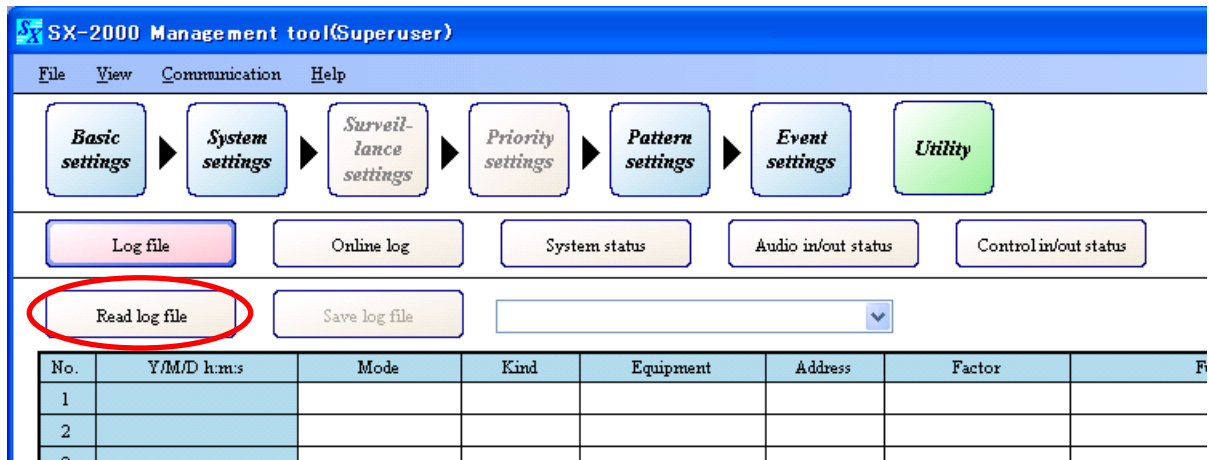
Operation log data saved to a CF card is automatically assigned the file name "Sx2kOp\*\*.s2l," and similarly failure log data is assigned the file name "Sx2kFa\*\*.s2l." The (\*\*) represents a number from 00 to 99 indicating the order in which the logs have been saved. If more than 100 files are saved, the oldest file (those with lower numbers) is automatically overwritten. Therefore, judge whether the file is new or old from the date of the file. A maximum number of logs that can be displayed are 1,000 for the operation logs and 100 for the failure logs.

Regarding the method of saving the SX-2000SM's histories to a CF card, see the separate Operating Instructions.

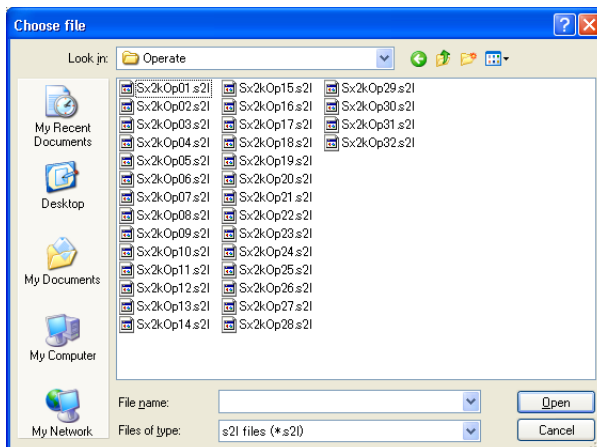
### 13.1.1. Reading the log file

When log data is not displayed on the log file screen or when it is desirable to display other log data stored in a different folder from that in which the currently displayed log data is stored, read the log file (.s2l) in the following procedure.

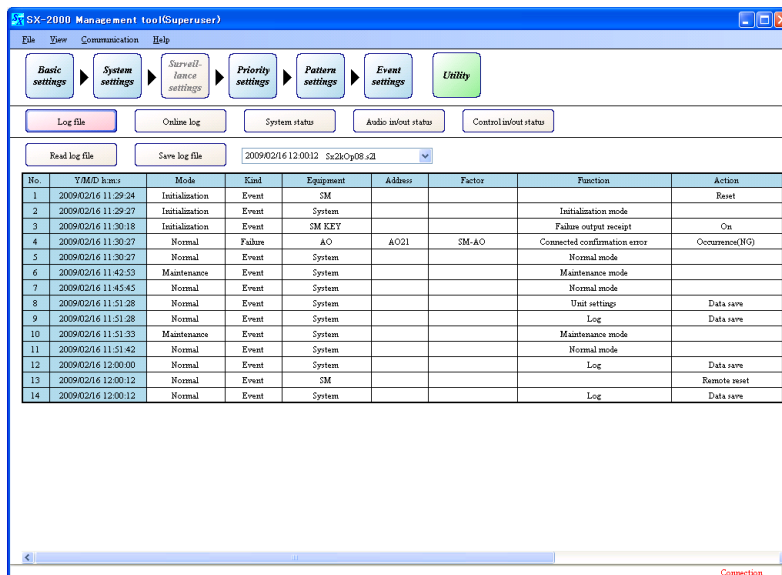
**Step 1.** Press the [Read log file] button on the log file display screen.



An "Open" dialog is displayed.



**Step 2.** Designate the folder where the log file is saved, and select the file, then press the [Open] button. Log data is displayed on the log file display screen.



The date, time and filename of the read log file are displayed.

The screenshot shows the 'Utility' menu in the SX-2000 Management tool. The 'Read log file' button is active, and a dropdown menu is open, displaying the selected log file: '2009/02/16 12:00:12 Sx2kOp08.s2l'. Below the dropdown is a table of log entries.

No.	Y/M/D h:m:s	Mode	Kind	Equipment	Address	Factor	
1	2009/02/16 11:29:24	Initialization	Event	SM			
2	2009/02/16 11:29:27	Initialization	Event	System			Initi
3	2009/02/16 11:30:18	Initialization	Event	SM KEY			Faihu
4	2009/02/16 11:30:27	Normal	Faihur	AO	AO21	SM-AO	Connected
5	2009/02/16 11:30:27	Normal	Event	System			N

Opening the pull-down menu displays an at-a-glance list of all log files stored in the same folder in order of updated time.

The log file can be switched by selecting another file.

The screenshot shows the 'Utility' menu with the 'Read log file' button active. The dropdown menu is open, displaying a list of log files sorted by time. The selected file is '2009/02/16 12:00:12 Sx2kOp08.s2l'. Below the dropdown is a table of log entries.

No.	Y/M/D h:m:s	Mode	Kind	Equipment	Address	Factor	
1	2009/02/16 11:29:24	Initialization	Event	SM			
2	2009/02/16 11:29:27	Initialization	Event	System			Initi
3	2009/02/16 11:30:18	Initialization	Event	SM KEY			Faihu
4	2009/02/16 11:30:27	Normal	Faihur	AO	AO21	SM-AO	Connected
5	2009/02/16 11:30:27	Normal	Event	System			N
6	2009/02/16 11:42:53	Maintenance	Event	System			Main
7	2009/02/16 11:45:45	Normal	Event	System			N

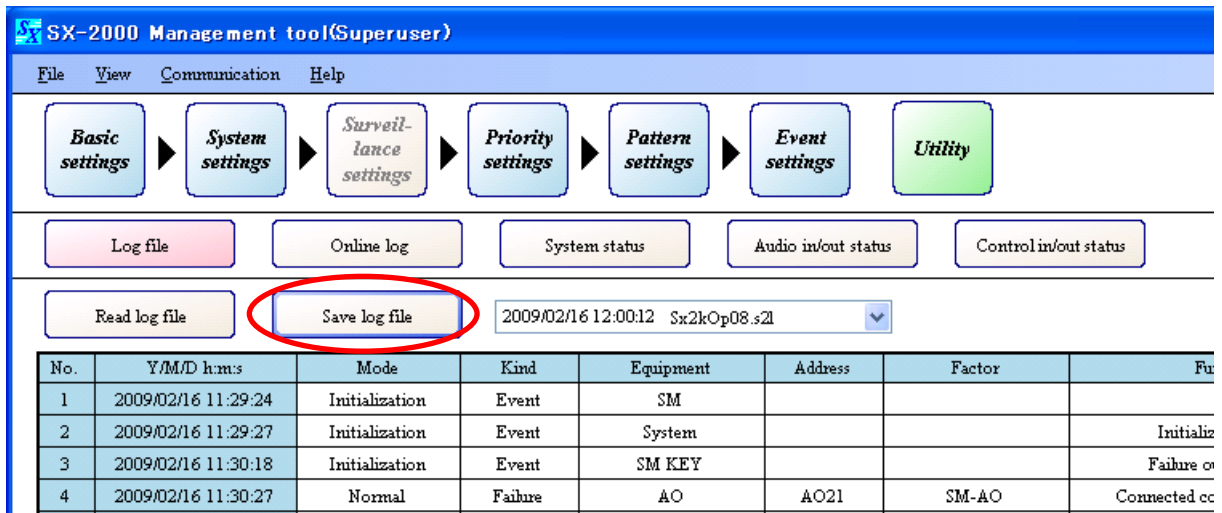
**Note**

Restart from Step 1 to display other log data stored in a different folder from that in which the currently displayed log data is stored.

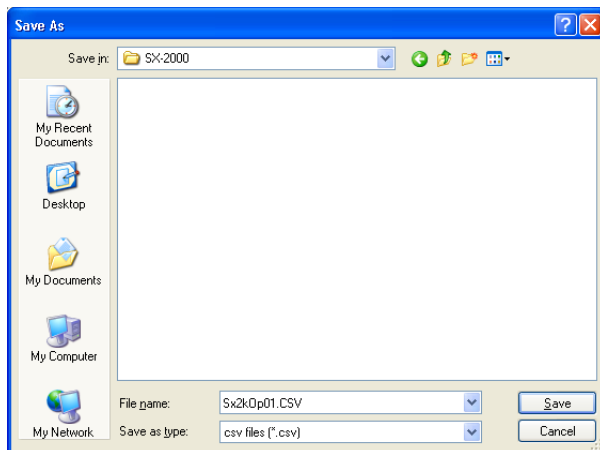
### 13.1.2. Saving the log file

Log data displayed on the log file display screen can be saved as a CSV-format file in the following procedure.

**Step 1.** Press [Save log file] button.



A "Save As" dialog is displayed.



**Step 2.** Using the "Save in" pull-down menu, select the folder where the log file is to be saved.

**Step 3.** Set a "File name."

**Note**

The filename "(Read filename).csv" is set by default. When changing the filename, be sure to add a filename extension (csv).

Example: 0605 log file.csv

**Step 4.** Press the [Save] button.

The "Save as" dialog is closed after the log data has been saved.

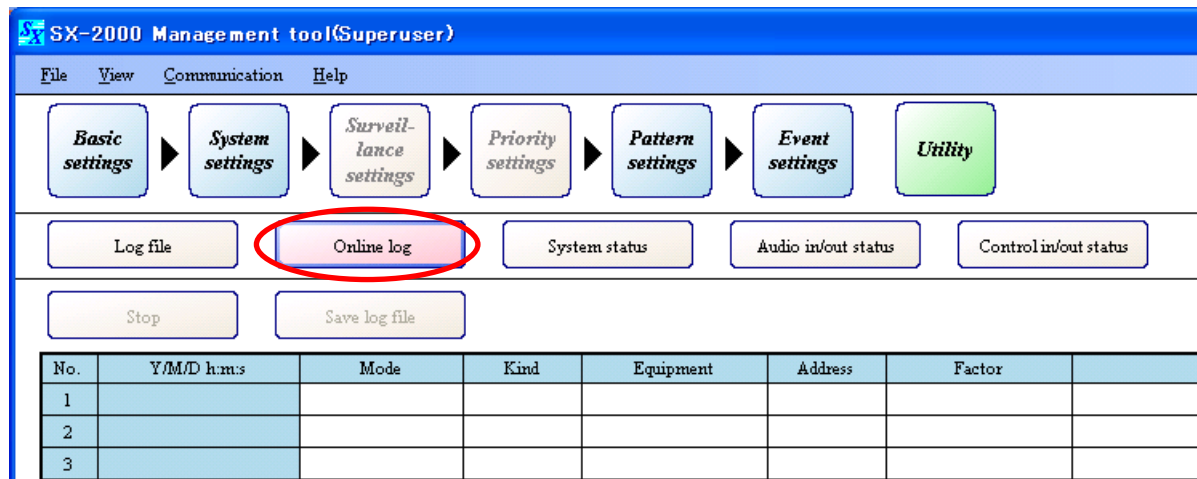
## 13.2. Online Log Confirmation

SX-2000 system operation and failure logs can be confirmed in real time.

**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

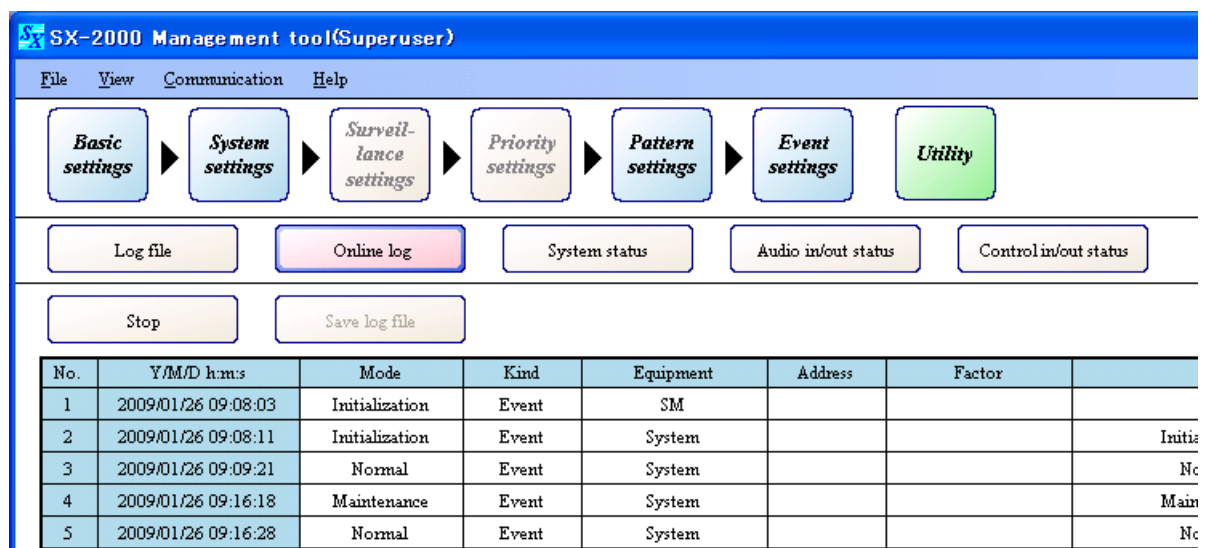
The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Press the [Online log] button on the Utility screen.

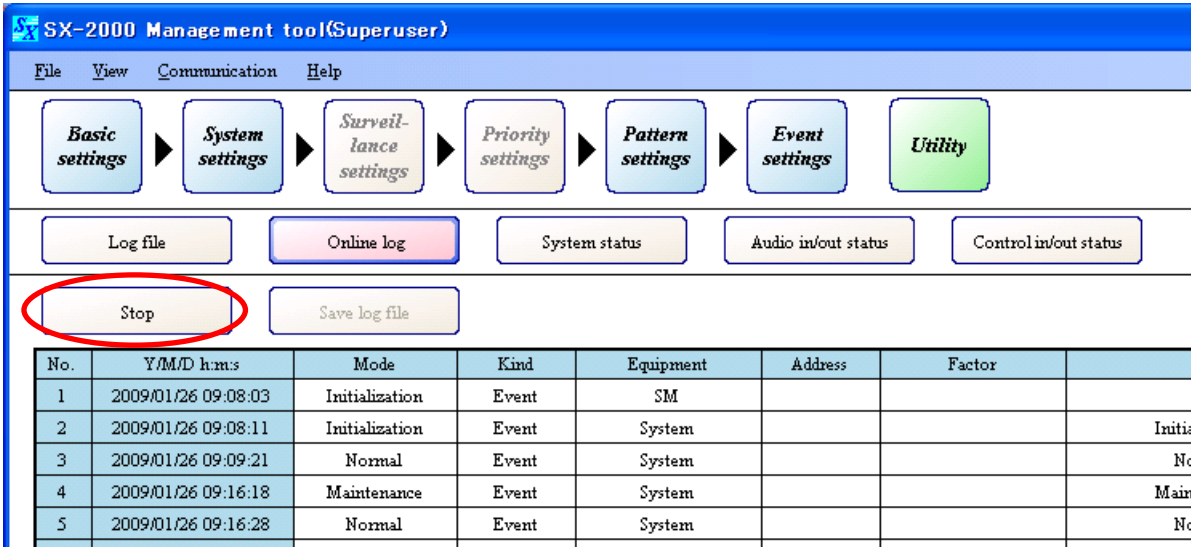


Logs are displayed in time sequence.

If a new operation or failure takes place, the logs are automatically updated and displayed.

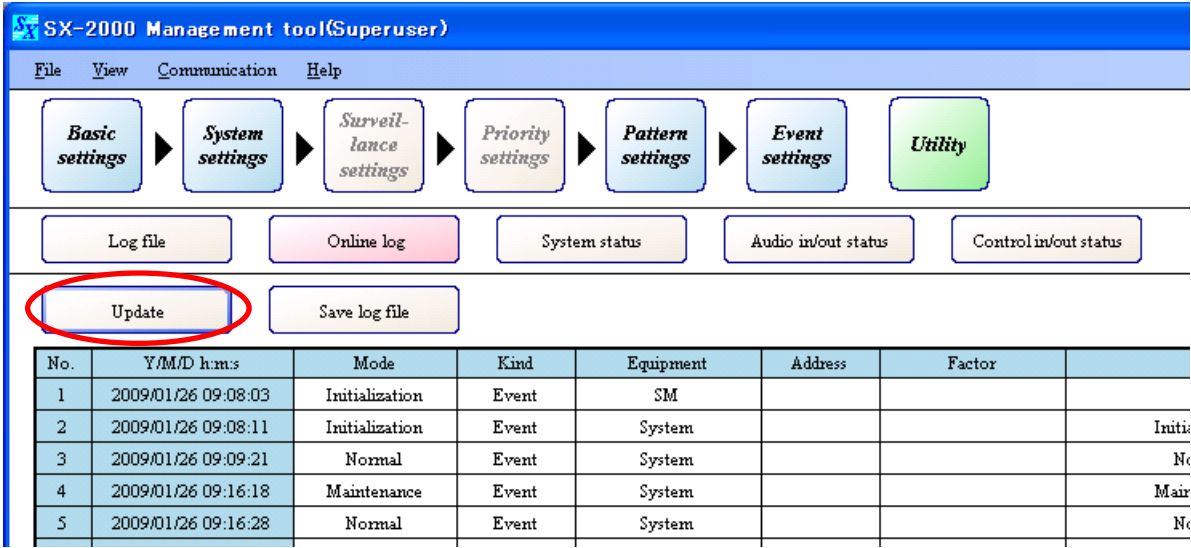


Step 3. To cause a log display update to pause, press the [Stop] button.



The [Stop] button changes to the [Update] button, allowing the [Save log file] button to be used.

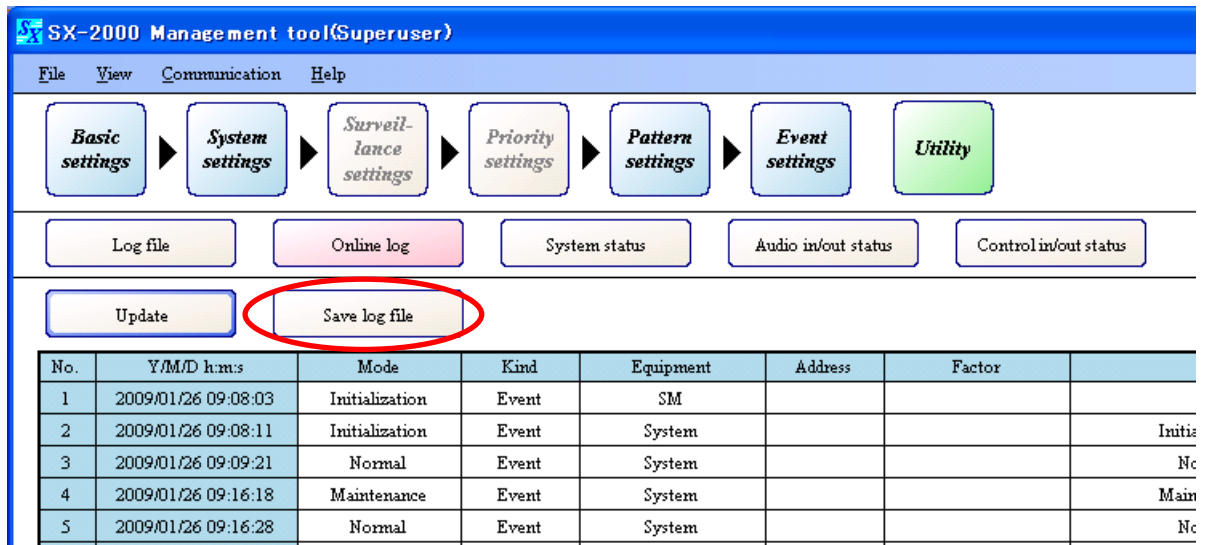
Step 4. To display the log again, press the [Update] button.



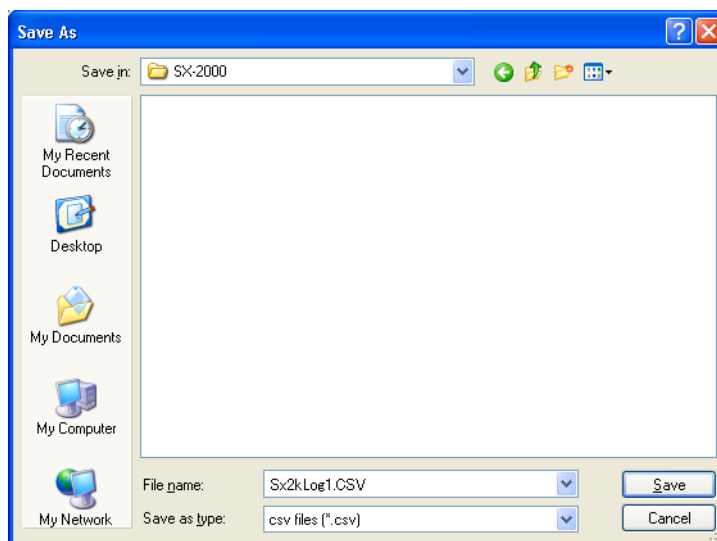
### 13.2.1. Saving log files acquired online

Log files displayed on the online log screen can be saved as a CSV-format file in the following procedure.

**Step 1.** Press [Save log file] button.



A "Save As" dialog is displayed.



**Step 2.** Using the "Save in" pull-down menu, select the folder where the log file is to be saved.

**Step 3.** Set a "File name."

**Note**

The filename "Sx2kLog1.csv" is set by default. When changing the filename, be sure to add a filename extension (csv).

**Step 4.** Press the [Save] button.

The "Save as" dialog is closed after the log data has been saved.



### 13.3. System Status Display Confirmation

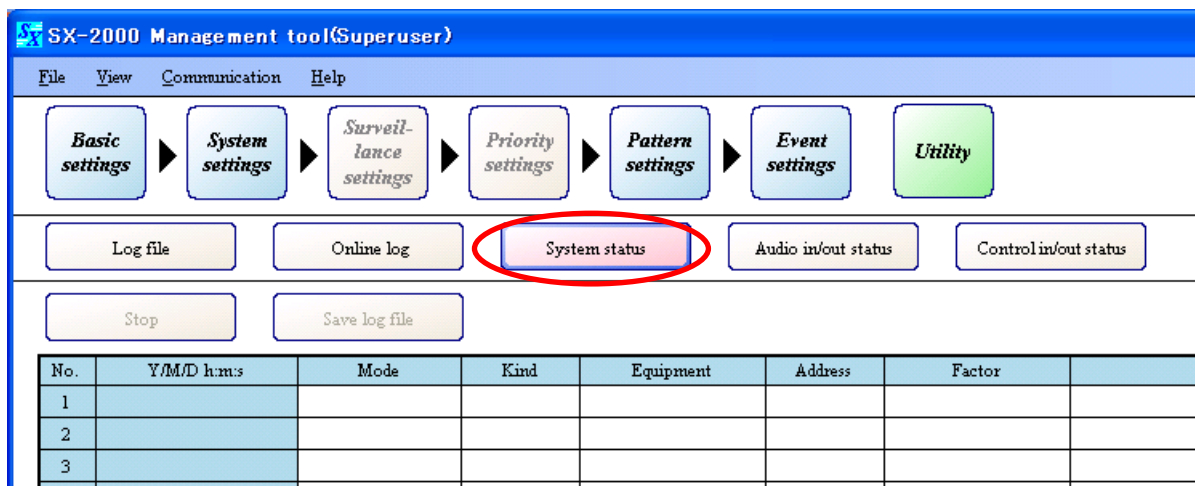
Pressing the [System status] button on the Utility screen displays the system status display screen, allowing the following information to be confirmed in real time:

- SX-2000SM, SX-2000AI, SX-2100AI, SX-2000AO, SX-2100AO, SX-2000CI, SX-2000CO, RM-200S, RM-200SA and RM-210
  - Individual unit's setting and connection status
  - Individual unit's operation mode and failure status
  - Individual unit's version information
- Failure status of amplifiers, speaker lines and power supply (when the SX-2100AO Audio Output Unit is used)

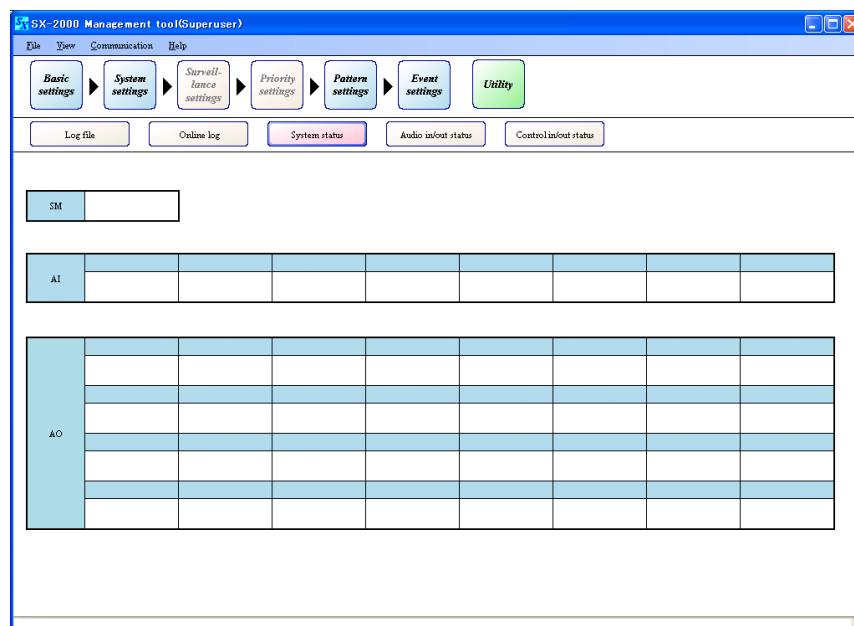
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software. For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Press the [System status] button on the Utility screen.

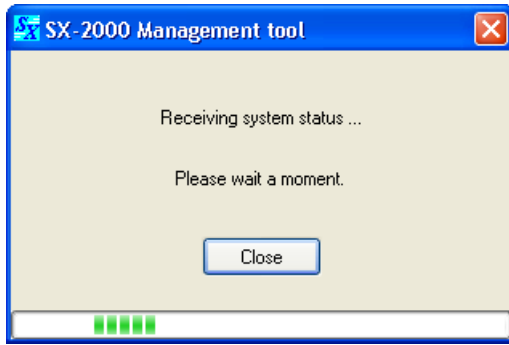


The system status display screen is displayed.



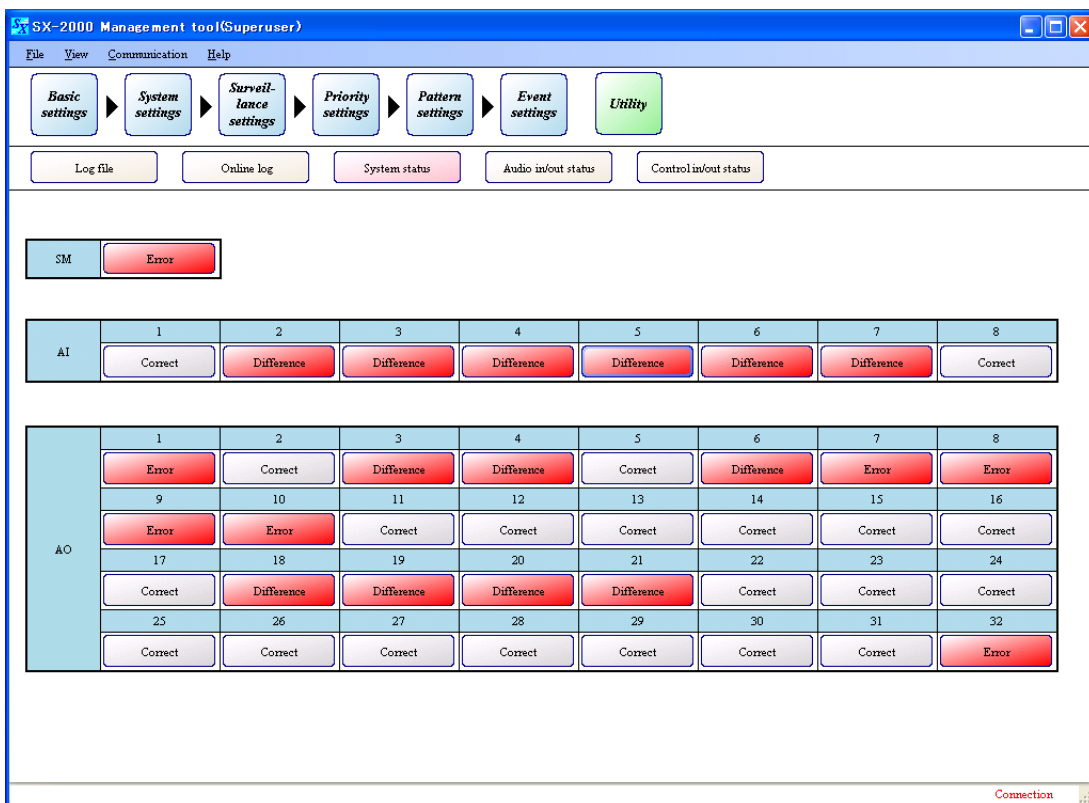


System status information is automatically acquired.



After information receipt is completed, the current system status is displayed on the system status display screen.

After the system status information has been acquired, the latest system status is automatically updated and displayed.



### 13.3.1. System status display screen

Each unit's status is displayed on its corresponding button, and clicking on a button displays its detailed information screen.

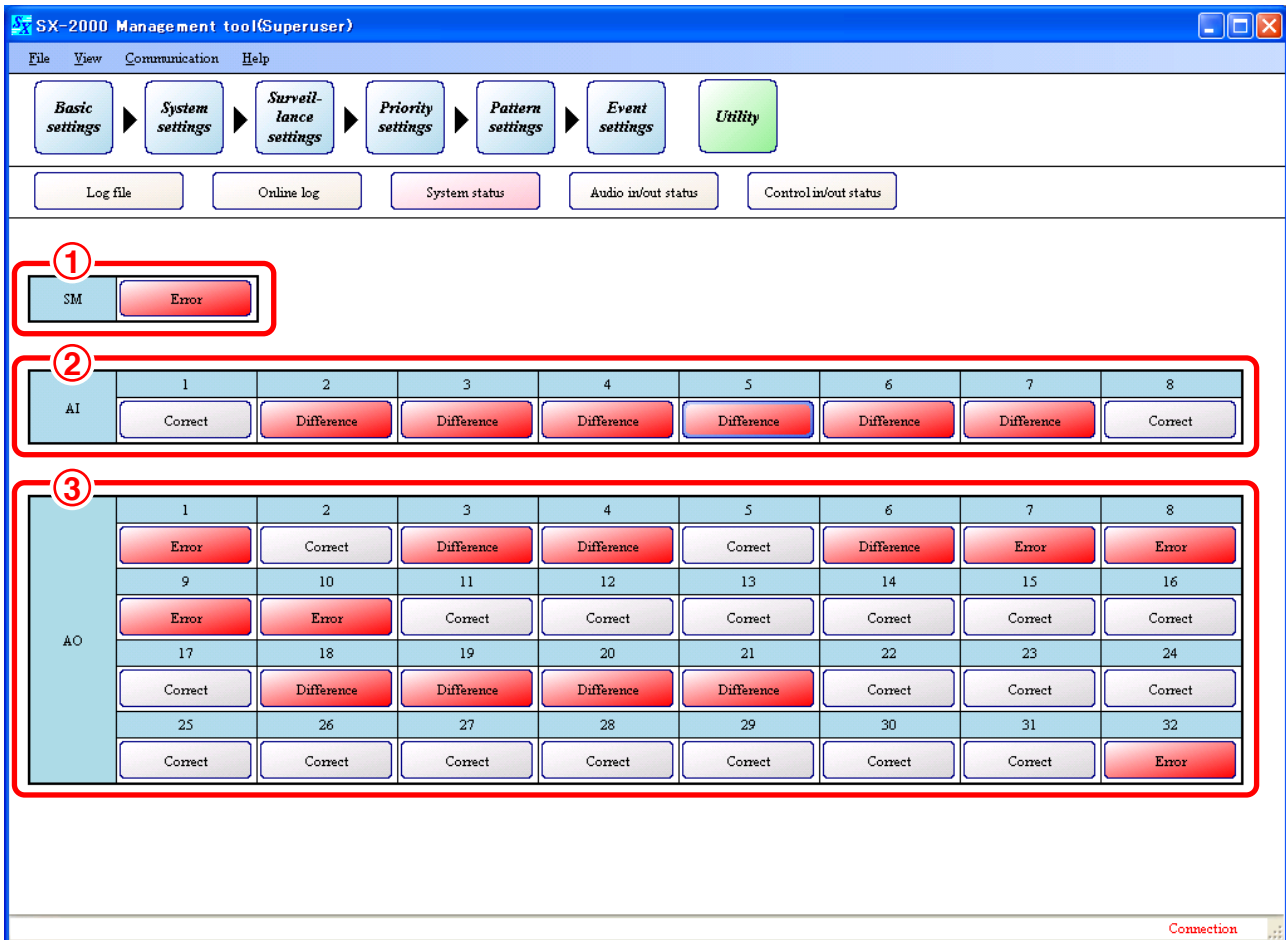
(Buttons for units that have not been set for connection cannot be selected.)

Two or more detailed information screens can be displayed (for the number of units set for connection).

The system status can be updated even when the detailed information screen is displayed.

#### Note

"SM" stands for the SX-2000SM System Manager, "AI" stands for the SX-2000AI and SX-2100AI Audio Input Units and "AO" stands for the SX-2000AO and SX-2100AO Audio Output Units.



#### 1. SM



Displays the SX-2000SM's system status.

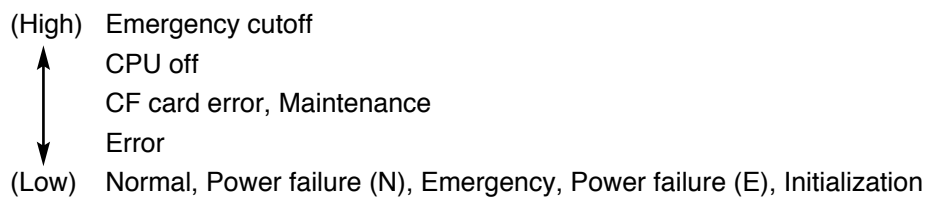
Clicking the button displays the detailed information screen (SM Unit screen).

(Refer to [p. 133 "SM unit screen"](#))

On-button indication	System status
(Blank)	No connection settings.
Normal	Normal operating conditions.
Power failure (N)	Operating on the VX-2000DS' or VX-3000DS' backup power supply.
Emergency	Emergency broadcast in progress.
Power failure (E)	Emergency broadcast in progress using the VX-2000DS' or VX-3000DS' backup power supply.

On-button indication	System status
CF card error	CF card irregularities detected: <ul style="list-style-type: none"> <li>• CF card not inserted.</li> <li>• Cannot read the CF card since the SX-2000SM's DIP switch 2 is set to ON.</li> <li>• No setting data.</li> <li>• Cannot read setting data.</li> <li>• No EV message data.</li> <li>• EV message data irregularities detected.</li> <li>• Insufficient space available on CF card.</li> <li>• CF card has failed.</li> </ul>
Maintenance	Operating in maintenance mode. <ul style="list-style-type: none"> <li>• The SX-2000SM's DIP switch 2 is set to ON.</li> <li>• CF card not inserted.</li> </ul>
Initialization	Initialization in progress.
CPU off	The system is in the CPU off state. Since the RM-200S, RM-200SA, RM-210, SX-2000CI and SX-2000CO are reset in the CPU off state, they are disconnected.
Emergency cutoff	One of the SX-2000AO units is in the emergency mode that cuts off 24V DC to allow emergency broadcasts to go through.
Error	The SX-2000SM has failed.

[Button indication priorities when multiple statuses occur simultaneously]



## 2. AI

AI	1	2	3	4	5	6	7	8
	Correct	Difference	Difference	Difference	Difference	Difference	Difference	Correct

Displays SX-2000AI or SX-2100AI system status.

A number represents the unit number of the SX-2000AI or SX-2100AI that has been set for connection.

Clicking the button displays the detailed information screen (AI unit screen).

(Refer to [p. 136 "AI unit screen"](#))

On-button indication	System status
(Blank)	No connection setting.
Correct	The SX-2000AI or SX-2100AI is operating correctly. (Preprogrammed units match actually connected units.)
Error	The SX-2000AI, SX-2100AI, RM-200S, RM-200SA or RM-210 has failed.
Difference	Preprogrammed units do not match actually connected units.

[Button display priorities when multiple statuses simultaneously occur]

Error > Difference > Correct

### 3. AO

AO	1	2	3	4	5	6	7	8
	Error	Correct	Difference	Difference	Correct	Difference	Error	Error
	9	10	11	12	13	14	15	16
	Error	Error	Correct	Correct	Correct	Correct	Correct	Correct
	17	18	19	20	21	22	23	24
	Correct	Difference	Difference	Difference	Difference	Correct	Correct	Correct
25	26	27	28	29	30	31	32	
Correct	Correct	Correct	Correct	Correct	Correct	Correct	Error	

Displays SX-2000AO or SX-2100AO system status.

A number represents the unit number of the SX-2000AO or SX-2100AO that has been set for connection.

Clicking the button displays the detailed information screen (AO unit screen).

(Refer to [p. 141 "AO unit screen"](#))

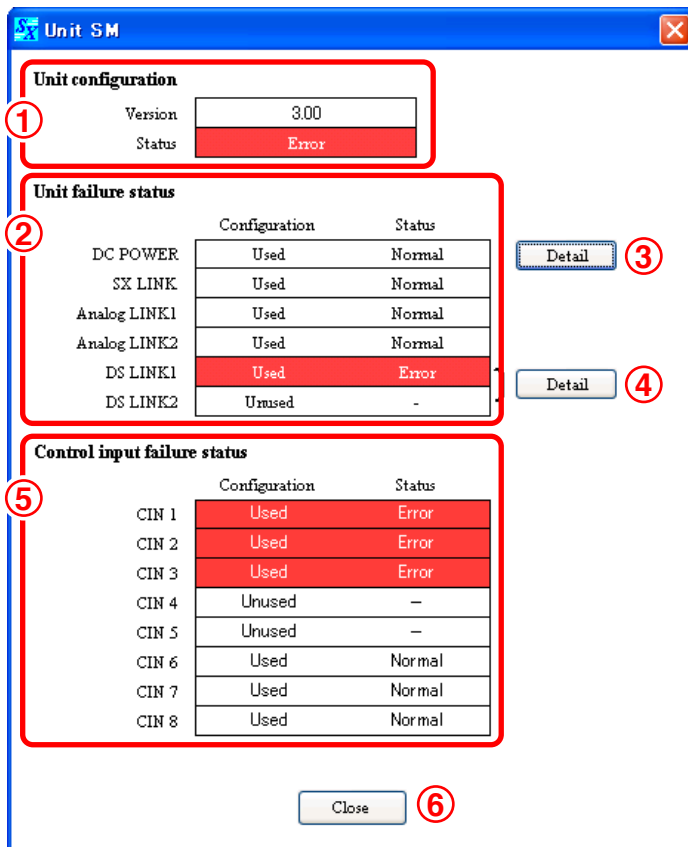
On-button indication	System status
(Blank)	No connection setting.
Correct	The SX-2000AO or SX-2100AO is operating correctly. (Preprogrammed units match actually connected units.)
Emergency cutoff	The SX-2000AO unit is in the emergency mode that cuts off 24V DC to allow emergency broadcasts to go through.
Difference	Preprogrammed units do not match actually connected units.
Error	The SX-2000AO, SX-2100AO, SX-2000CI or SX-2000CO has failed.

[Button display priorities when multiple statuses simultaneously occur]

Emergency cutoff > Error > Difference > Correct

### 13.3.2. SM unit screen

Clicking the SM button on the system status display screen displays the SM unit screen.



#### 1. Unit configuration

Version	3.00
Status	Error

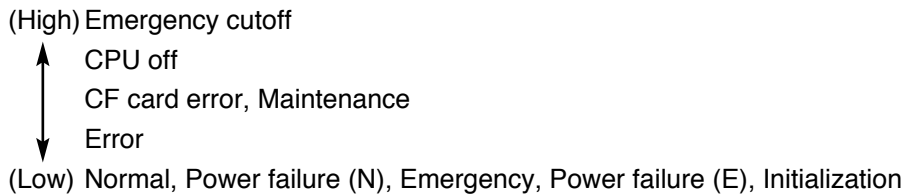
Displays the SX-2000SMs system status.

- **Version**  
Displays the SX-2000SM's firmware version.
- **Status**  
Displays the SX-2000SM's system status or operation mode.

Display	System Status
Normal	Normal operating conditions.
Power failure (N)	Operating on the VX-2000DS' or VX-3000DS' backup power supply.
Emergency	Emergency broadcast in progress.
Power failure (E)	Emergency broadcast in progress using the VX-2000DS' or VX-3000DS' backup power supply.
CF card error	CF card irregularities detected: <ul style="list-style-type: none"> <li>• CF card not inserted.</li> <li>• Cannot read the CF card since the SX-2000SM's DIP switch 2 is set to ON.</li> <li>• No setting data.</li> <li>• Cannot read setting data.</li> <li>• No EV message data.</li> <li>• EV message data irregularities detected.</li> <li>• Insufficient space available on CF card.</li> <li>• CF card has failed.</li> </ul>

Display	System Status
Maintenance	Operating in maintenance mode. • The SX-2000SM's DIP switch 2 is set to ON. • CF card not inserted.
Initialization	Initialization in progress.
CPU off	The system is in the CPU off state.
Emergency cutoff	One of the SX-2000AO units is in the emergency mode that cuts off 24V DC to allow emergency broadcasts to go through.
Error	The SX-2000SM has failed.

[Button indication priorities when multiple statuses occur simultaneously]



## 2. Unit failure status

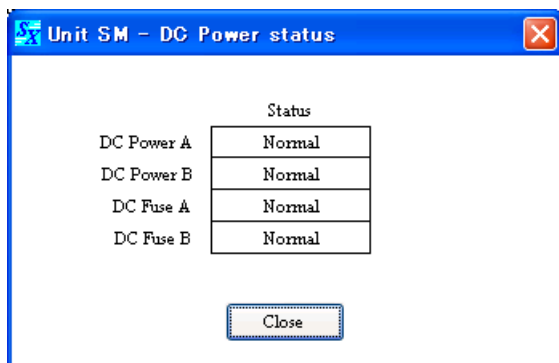
	Configuration	Status
DC POWER	Used	Normal
SX LINK	Used	Normal
Analog LINK1	Used	Normal
Analog LINK2	Used	Normal
DS LINK1	Used	Error
DS LINK2	Unused	–

Displays the SX-2000SM's failure status.  
Indicated items are DC power, SX link, Analog link and DS link.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. Displays the "Normal" indication for normal conditions and the "Error" indication or the cause of failure in the event of irregularities. Displays the " – " indication when the failure check function is not in operation.

## 3. DC Power detail button

Clicking this button displays the DC power detail screen.

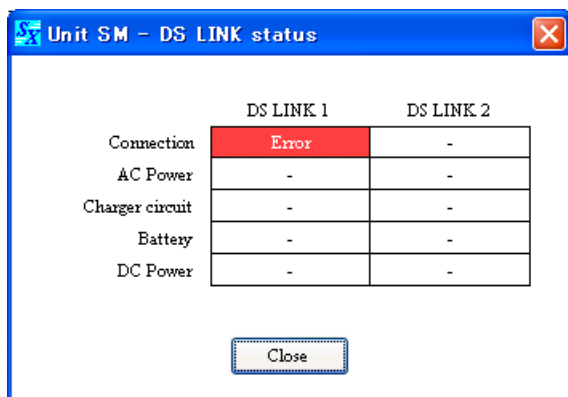


Displays the DC power and fuse status.  
The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.  
Clicking the [Close] button closes the DC power detail screen.

#### 4. DS Link detail button

**Note:** This button is used when the VX-2000DS or VX-3000DS has been connected.

Clicking this button displays the DS Link detail screen.



Displays cable connection, AC power supply, battery, and DC power supply statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the "-" indication when the failure check function is not in operation.

Clicking the [Close] button closes the DS Link detail screen.

**Note:** In the system including 2 or more VX-3000DS units, if abnormality occurs at any VX-3000DS, the status of the corresponding item shows "Error."

#### 5. Control input failure status

	Configuration	Status
CIN 1	Used	Error
CIN 2	Used	Error
CIN 3	Used	Error
CIN 4	Unused	-
CIN 5	Unused	-
CIN 6	Used	Normal
CIN 7	Used	Normal
CIN 8	Used	Normal

Displays the control input failure status.

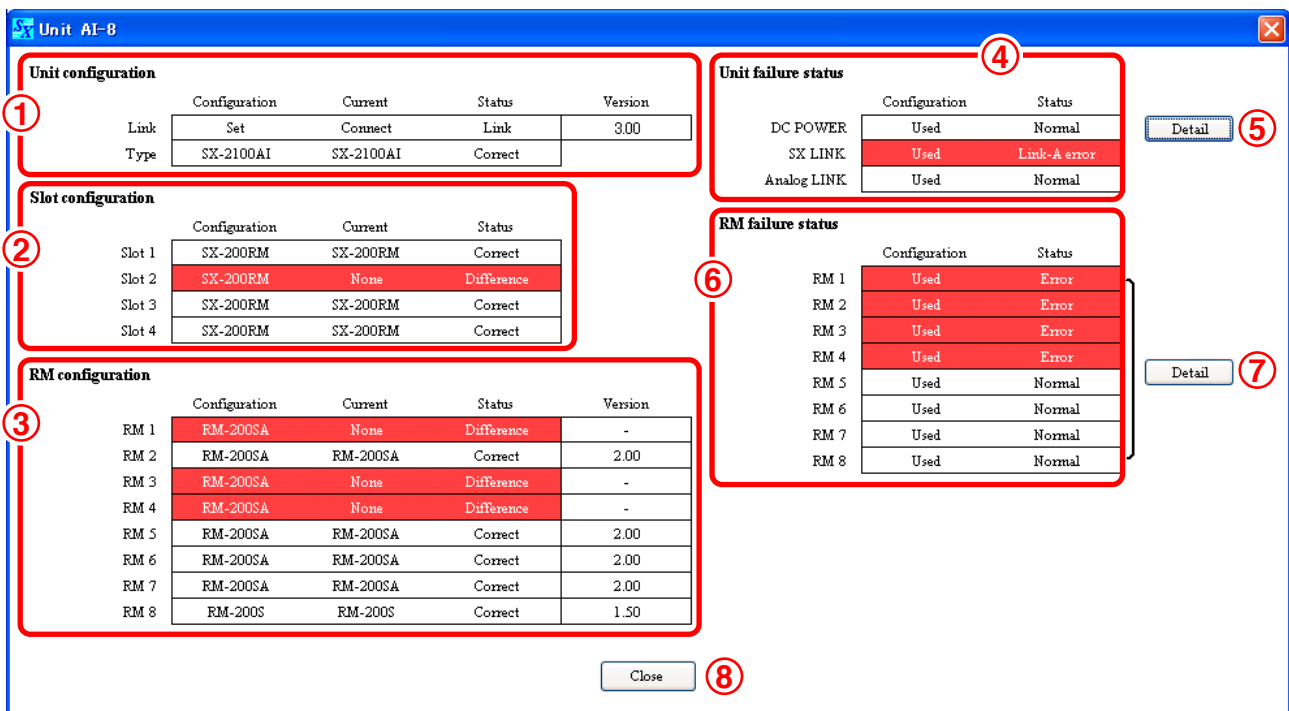
Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. Displays the "Normal" indication for normal conditions and the "Error" indication or the cause of failure in the event of irregularities. Displays the "-" indication when the failure check function is not in operation.

#### 6. Close button

Clicking this button closes the SM unit screen.

### 13.3.3. AI unit screen

Clicking the AI button on the system status display screen displays the AI unit screen.



#### 1. Unit configuration

	Configuration	Current	Status	Version
Link	Set	Connect	Link	3.00
Type	SX-2100AI	SX-2100AI	Correct	

• **Link**

Displays the SX-2000AI or SX-2100AI system status.

Configuration	Displays connection setting information. • Set: Connection settings performed. • None: No connection settings performed.
Current	Displays actual connection status. • Connect: The SX-2000AI or SX-2100AI is connected. • Disconnect: The SX-2000AI or SX-2100AI is not connected.
Status:	Displays whether the SX-2000AI or SX-2100AI can communicate with and system control can be performed from the SX-2000SM. • Link: The SX-2000AI or SX-2100AI can communicate with the SX-2000SM and system control can be performed from the SX-2000SM. • Unlink: SX-2000SM communications not available, since the SX-2000AI or SX-2100AI is not connected or powered. • Mismatch version: SX-2000AI or SX-2100AI and SX-2000SM versions incompatible, disabling communications.

**Note**

The Link indication is displayed in red if errors are shown in "Current" or "Status."

	Configuration	Current	Status
Link	Set	Disconnect	Mismatch version



• **Type**

Displays SX-2000AI or SX-2100AI status.

Configuration	<p>Displays unit setting information.</p> <ul style="list-style-type: none"> <li>• SX-2000AI: The SX-2000AI is set.</li> <li>• SX-2100AI: The SX-2100AI is set.</li> <li>• Unknown: Unit settings are unknown.</li> <li>• – : The SX-2000AI or SX-2100AI is not physically connected.</li> </ul>
Current	<p>Displays connected units.</p> <ul style="list-style-type: none"> <li>• SX-2000AI: The SX-2000AI is physically connected.</li> <li>• SX-2100AI: The SX-2100AI is physically connected.</li> <li>• Unknown: The model type of the actually connected unit is unrecognizable.</li> <li>• – : The SX-2000AI or SX-2100AI is not physically connected.</li> </ul>
Status	<p>Displays the comparison results of preprogrammed and actually connected units.</p> <ul style="list-style-type: none"> <li>• Correct: "Configuration" matches "Current."</li> <li>• Different: "Configuration" does not match "Current."</li> <li>• – : The SX-2000AI or SX-2100AI is not physically connected.</li> </ul>

**Note:** The Type indication is displayed in red if errors are shown in "Current" or "Status."

• **Version**

Displays the SX-2000AI or SX-2100AI firmware version.

**2. Slot configuration**

	Configuration	Current	Status
Slot 1	SX-200RM	SX-200RM	Correct
Slot 2	SX-200RM	None	Difference
Slot 3	SX-200RM	SX-200RM	Correct
Slot 4	SX-200RM	SX-200RM	Correct

This function displays the status of all input modules inserted in the unit's module slots.

Configuration	<p>Displays the names of set input modules.</p> <ul style="list-style-type: none"> <li>• None: No modules set to be inserted.</li> <li>• D-921F/E: The D-921F or D-921E is set.</li> <li>• D-922F/E: The D-922F or D-922E is set.</li> <li>• D-936R: The D-936 is set.</li> <li>• SX-200RM: The SX-200RM is set.</li> </ul>
Current	<p>Displays the names of input modules actually inserted in slots.</p> <ul style="list-style-type: none"> <li>• None: No modules inserted.</li> <li>• D-921F/E: The D-921F or D-921E is inserted.</li> <li>• D-922F/E: The D-922F or D-922E is inserted.</li> <li>• D-936R: The D-936R is inserted.</li> <li>• D-971M/E: The D-971M or D-971E is inserted.</li> <li>• D-971R: The D-971R is inserted.</li> <li>• SX-200RM: The SX-200RM is inserted.</li> </ul>
Status	<p>Displays the comparison results of preprogrammed settings and actually inserted modules.</p> <ul style="list-style-type: none"> <li>• Correct: "Configuration" matches "Current."</li> <li>• Different: "Configuration" does not match "Current."</li> </ul>

**Note:** The Slot indication is displayed in red if errors are shown in "Current" or "Status."

### 3. RM configuration

	Configuration	Current	Status	Version
RM 1	RM-200SA	None	Difference	-
RM 2	RM-200SA	RM-200SA	Correct	2.00
RM 3	RM-200SA	None	Difference	-
RM 4	RM-200SA	None	Difference	-
RM 5	RM-200SA	RM-200SA	Correct	2.00
RM 6	RM-200SA	RM-200SA	Correct	2.00
RM 7	RM-200SA	RM-200SA	Correct	2.00
RM 8	RM-200S	RM-200S	Correct	1.50

This function displays the status of each remote microphone.

Configuration	<p>Displays the type of remote microphone that has been set for connection, and the number of expansion units.</p> <ul style="list-style-type: none"> <li>• None: No connection settings.</li> <li>• RM-200S: The RM-200S is set.</li> <li>• RM-200S + EXT *: The RM-200S and * pieces of expansion units are set. (Up to 4 expansion units can be connected.)</li> <li>• RM-200SF: The RM-200SF is set.</li> <li>• RM-200SF + EXT *: The RM-200SF and * pieces of expansion units are set. (Up to 5 expansion units can be connected.)</li> <li>• RM-200SA: The RM-200SA is set.</li> <li>• RM-200SA + EXT *: The RM-200SA and * pieces of expansion units are set. (Up to 4 expansion units can be connected.)</li> </ul>
Current	<p>Displays the type of actually connected remote microphone and the number of expansion units.</p> <ul style="list-style-type: none"> <li>• None: No units connected.</li> <li>• RM-200S: The RM-200S is connected.</li> <li>• RM-200S + EXT *: The RM-200S and * pieces of expansion units are connected. (Up to 4 expansion units can be connected.)</li> <li>• RM-200SF: The RM-200SF is connected.</li> <li>• RM-200SF + EXT *: The RM-200SF and * pieces of expansion units are connected. (Up to 5 expansion units can be connected.)</li> <li>• RM-200SA: The RM-200SA is connected.</li> <li>• RM-200SA + EXT *: The RM-200SA and * pieces of expansion units are connected. (Up to 4 expansion units can be connected.)</li> </ul>
Status	<p>Displays the comparison result of preprogrammed connection settings and actual connection status.</p> <ul style="list-style-type: none"> <li>• Correct: "Configuration" matches "Current."</li> <li>• Error: Remote microphone has failed.</li> <li>• Different: "Configuration" does not match "Current."</li> </ul>

**Note:** The RM configuration indication is displayed in red if errors are shown in "Current" or "Status."

Version	Displays the remote microphone's firmware version.
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#### 4. Unit failure status

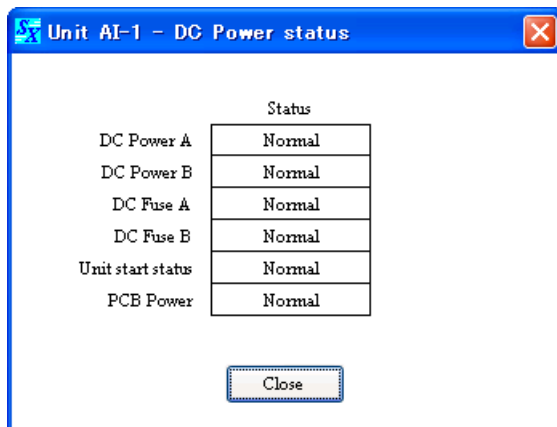
	Configuration	Status
DC POWER	Used	Normal
SX LINK	Used	Link-A error
Analog LINK	Used	Normal

This function displays the failure status of the SX-2000AI or SX-2100AI unit.  
The indicated items are DC power supply, SX link and analog link.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. Displays the "Normal" indication for normal conditions and the "Error" indication or the cause of failure in the event of irregularities. Displays the " - " indication when the failure check function is not in operation.

#### 5. DC Power detail button

Clicking this button displays the DC power detail screen.



Displays the DC power supply, fuse and hardware statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " - " indication when the failure check function is not in operation.

Clicking the [Close] button closes the DC power detail screen.

## 6. RM failure status

	Configuration	Status
RM 1	Used	Error
RM 2	Used	Error
RM 3	Used	Error
RM 4	Used	Error
RM 5	Used	Normal
RM 6	Used	Normal
RM 7	Used	Normal
RM 8	Used	Normal

This function displays each remote microphone's failure status.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. Displays the "Normal" indication for normal conditions and the "Error" indication or the cause of failure in the event of irregularities. Displays the " – " indication when the failure check function is not in operation.

## 7. RM failure status detail button

Clicking this button displays the RM failure status detail screen.

	RM 1	RM 2	RM 3	RM 4	RM 5	RM 6	RM 7	RM 8
Connection	Error	Normal	Error	Error	Normal	Normal	Normal	Normal
Mic element	-	Normal	-	-	Normal	Normal	Normal	Normal
Mic connector	-	Error	-	-	Normal	Normal	Normal	Normal
Unit power	-	Normal	-	-	Normal	Normal	Normal	Normal
Talk switch	-	Normal	-	-	Normal	Normal	Normal	Normal
Emg switch	-	Normal	-	-	Normal	Normal	Normal	Normal
20kHz	-	Normal	-	-	Normal	Normal	Normal	Normal

Close

Displays the DC power supply, connection and hardware statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.

Clicking the [Close] button closes the RM failure status detail screen.

## 8. Close button

Clicking this button closes the AI unit screen.

### 13.3.4. AO unit screen

Clicking the AO button on the system status screen displays the AO unit screen.

The screenshot shows the 'Unit AO-17' interface with the following sections and callouts:

- 1**: Unit configuration table.
- 2**: CI/CO configuration table.
- 3**: Unit failure status table.
- 4**: Detail button for Unit failure status.
- 5**: Detail button for CI/CO failure status.
- 6**: CI/CO failure status table.
- 7**: Detail button for CI/CO failure status (ID 1).
- 8**: Detail button for CI/CO failure status (ID 2).
- 9**: Amplifier failure status table.
- 10**: Detail button for Amplifier failure status.
- 11**: Loud speaker line status table.
- 12**: Close button.

#### 1. Unit configuration

	Configuration	Current	Status	Version
Link	Set	Connect	Link	3.00
Type	SX-2100AO	SX-2100AO	Correct	

#### • Link

Displays the SX-2000AO or SX-2100AO system status.

Configuration	Displays connection setting information. • Set: Connection settings performed. • None: No connection settings performed.
Current	Displays actual connection status. • Connect: The SX-2000AO or SX-2100AO is connected. • Disconnect: The SX-2000AO or SX-2100AO is not connected.
Status	Displays whether the SX-2000AO or SX-2100AO can communicate with and system control can be performed from the SX-2000SM. • Link: The SX-2000AO or SX-2100AO can communicate with the SX-2000SM and system control can be performed from the SX-2000SM. • Unlink: SX-2000SM communications not available, since the SX-2000AO or SX-2100AO is not connected or powered. • Emergency cutoff: Since the corresponding SX-2000AO unit is preset to cut off the 24V DC power supply to allow emergency broadcast to go through, the SX-2000SM cannot perform control. • Mismatch version: SX-2000AO or SX-2100AO and SX-2000SM versions incompatible, disabling communications.

#### Note

The Link indication is displayed in red if errors are shown in "Current" or "Status."

	Configuration	Current	Status
Link	Set	Disconnect	Mismatch version

• **Type**

Displays SX-2000AO or SX-2100AO status.

Configuration	<p>Displays unit setting information.</p> <ul style="list-style-type: none"> <li>• SX-2000AO: The SX-2000AO is set.</li> <li>• SX-2100AO: The SX-2100AO is set.</li> <li>• Unknown: Unit settings are unknown.</li> <li>• – : The SX-2000AO or SX-2100AO is not physically connected.</li> </ul>
Current	<p>Displays connected units.</p> <ul style="list-style-type: none"> <li>• SX-2000AO: The SX-2000AO is physically connected.</li> <li>• SX-2100AO: The SX-2100AO is physically connected.</li> <li>• Unknown: The model type of the actually connected unit is unrecognizable.</li> <li>• – : The SX-2000AO or SX-2100AO is not physically connected.</li> </ul>
Status	<p>Displays the comparison results of preprogrammed and actually connected units.</p> <ul style="list-style-type: none"> <li>• Correct: "Configuration" matches "Current."</li> <li>• Different: "Configuration" does not match "Current."</li> <li>• – : The SX-2000AO or SX-2100AO is not physically connected.</li> </ul>

**Note:** The Type indication is displayed in red if errors are shown in "Current" or "Status."

• **Version**

Displays the SX-2000AO or SX-2100AO firmware version.

**2. CI/CO configuration**

	Configuration	Current	Status	Version
ID 1	SX-2000CI	SX-2000CI	Correct	2.00
ID 2	SX-2000CO	SX-2000CO	Correct	2.00

Displays SX-2000CI or SX-2000CO status.

Configuration	<p>Displays the type of the SX-2000CI or SX-2000CO unit that has been set for connection.</p> <ul style="list-style-type: none"> <li>• None: No connection settings.</li> <li>• SX-2000CI: The SX-2000CI is set.</li> <li>• SX-2000CO: The SX-2000CO is set.</li> </ul>
Current	<p>Displays the type of actually connected SX-2000CI or SX-2000CO unit.</p> <ul style="list-style-type: none"> <li>• None: No units actually connected.</li> <li>• SX-2000CI: The SX-2000CI is physically connected.</li> <li>• SX-2000CO: The SX-2000CO is physically connected.</li> </ul>
Status	<p>Displays the comparison results of preprogrammed and actually connected units.</p> <ul style="list-style-type: none"> <li>• Correct: "Configuration" matches "Current."</li> <li>• Different: "Configuration" does not match "Current."</li> </ul>

**Note:** The CI/CO configuration indication is displayed in red if errors are shown in "Current" or "Status."

Version	Displays the SX-2000CI or SX-2000CO software version.
---------	---

### 3. Unit failure status

	Configuration	Status
DC POWER	Used	Normal
SX LINK	Used	Link-B error
Analog LINK	Used	Normal
CI/CO LINK	Used	Normal
DS LINK1	Used	Normal
DS LINK2	Used	Normal

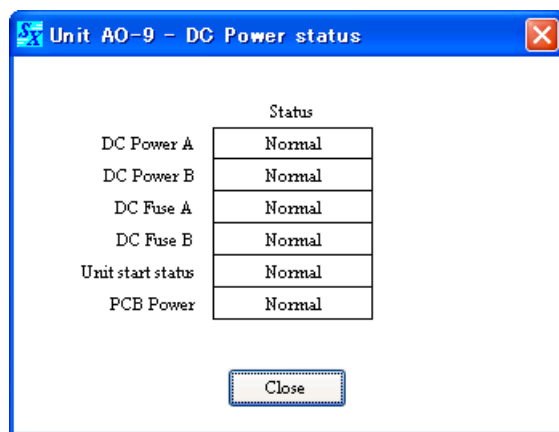
This function displays the SX-2000AO's failure status.

The indicated items are DC power supply, SX link, analog link, CI/CO link and DS link.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. Displays the "Normal" indication for normal conditions and the "Error" indication or the cause of failure in the event of irregularities. Displays the " – " indication when the failure check function is not in operation.

### 4. DC Power detail button

Clicking this button displays the DC power detail screen.



Displays the DC power supply, fuse and hardware statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.

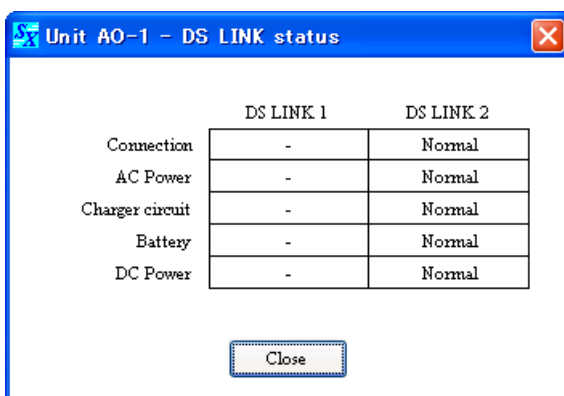
Clicking the [Close] button closes the DC power detail screen.

### 5. DS Link detail button

#### Note

Use this button to confirm the DS link status when the SX-2100AO is connected to the VX-2000DS or VX-3000DS unit.

Clicking this button displays the DS link detail screen.



Displays the cable connection, AC power supply, battery and DC power supply statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.

Clicking the [Close] button closes the DS link detail screen.

**Note:** In the system including 2 or more VX-3000DS units, if abnormality occurs at any VX-3000DS, the status of the corresponding item shows "Error."

## 6. CI/CO failure status

	Configuration	Status
ID 1	Used	Normal
ID 2	Used	Normal

ID 1 and 2 display the failure status of the SX-2000CI and SX-2000CO, respectively.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " - " indication when the failure check function is not in operation.

## 7. CI Failure status detail button

Clicking this button displays the CI failure status detail screen.

The screenshot shows a window titled "Unit AO-13 - ID1 (Unit CD)". It contains two main sections:

**Unit failure status**

	Status
DC Power A	Normal
DC Power B	Normal
DC Fuse A	Normal
DC Fuse B	Normal
Unit start status	Normal

**Control input failure status**

	Configuration	Status
CIN 1	Used	Normal
CIN 2	Used	Normal
CIN 3	Used	Normal
CIN 4	Used	Normal
CIN 5	Used	Normal
CIN 6	Used	Normal
CIN 7	Used	Normal
CIN 8	Used	Normal
CIN 9	Unused	-
CIN 10	Unused	-
CIN 11	Unused	-
CIN 12	Unused	-
CIN 13	Unused	-
CIN 14	Unused	-
CIN 15	Unused	-
CIN 16	Unused	-
CIN 17	Unused	-
CIN 18	Unused	-
CIN 19	Unused	-
CIN 20	Unused	-
CIN 21	Unused	-
CIN 22	Unused	-
CIN 23	Unused	-
CIN 24	Unused	-
CIN 25	Unused	-
CIN 26	Unused	-
CIN 27	Unused	-
CIN 28	Unused	-
CIN 29	Unused	-
CIN 30	Unused	-
CIN 31	Unused	-
CIN 32	Unused	-

At the bottom center of the window is a "Close" button.

Displays the DC power supply, fuse and control input failure statuses.

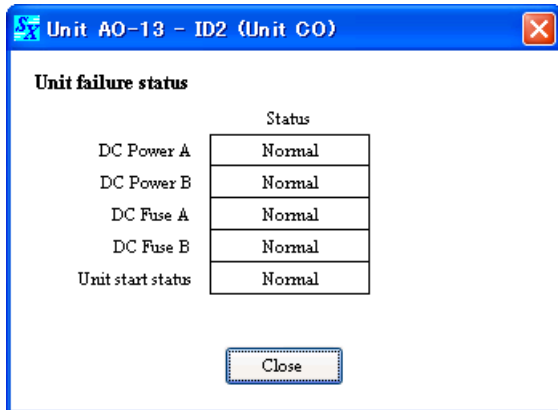
The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " - " indication when the failure check function is not in operation.

Clicking the [Close] button closes the CI failure status detail screen.



## 8. CO failure status detail button

Clicking this button displays the CO failure status detail screen.



Displays the DC power supply and fuse failure statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.

Clicking the [Close] button closes the CO failure status detail screen.

## 9. Amplifier failure status

### Note

Use this screen to confirm the amplifier status when the SX-2100AO is connected to the VP Series amplifiers.

	Configuration	Status
AMP 1	Used	Normal
AMP 2	Used	Error
AMP 3	Used	Normal
AMP 4	Used	Normal
AMP 5	Used	Normal
AMP 6	Used	Normal
AMP 7	Used	Error
AMP 8	Used	Normal
Standby AMP	Used	Normal

Switch over amplifier number AMP 2

Displays the power amplifier failure status.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays failure status. The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " – " indication when the failure check function is not in operation.

## 10. Amplifier failure status detail button

### Note

Use this button to confirm the amplifier failure status when the SX-2100AO is connected to the VP Series amplifiers.

Clicking this button displays the amplifier failure status detail screen.

	AMP 1	AMP 2	AMP 3	AMP 4	AMP 5	AMP 6	AMP 7	AMP 8	Standby AMP
Connection	-	-	Normal	Normal	Normal	Normal	Normal	Normal	Normal
DC fuse	-	-	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Overheat	-	-	Normal	Normal	Normal	Normal	Normal	Normal	Normal
20kHz(NF)	-	-	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Amp return	-	-	Normal	Normal	Normal	Normal	Normal	Normal	Normal

Close

Displays the amplifier connection, fuse and operating temperature statuses.

The "Normal" indication is displayed for normal conditions, the "Error" indication when irregularities are detected, and the " - " indication when the failure check function is not in operation.

Clicking the [Close] button closes the amplifier failure status detail screen.

## 11. Load speaker line status

### Note

Use this screen to confirm the speaker line status when the SX-2100AO is connected to the VP Series amplifiers.

	Configuration	Status
SP 1	Used	Earth leakage
SP 2	Used	Normal
SP 3	Used	Normal
SP 4	Used	Normal
SP 5	Used	Normal
SP 6	Used	Normal
SP 7	Used	Interruption
SP 8	Unused	-

Displays the speaker failure status.

Configuration	Displays the "Used" indication when the failure check function is in operation and the "Unused" indication when the function is not in operation.
Status	Displays the failure status. Displays the "Normal" indication for normal conditions and the cause of failure when irregularities are detected. There are three causes of failure: "Interruption," "Short circuit," and "Earth leakage." The " - " indication is displayed when the failure check function is not in operation.

## 12. Close button

Clicking this button closes the AO unit screen.

### 13.4. Audio Input and Output Status Confirmation

Audio input and output statuses can be confirmed in real time.

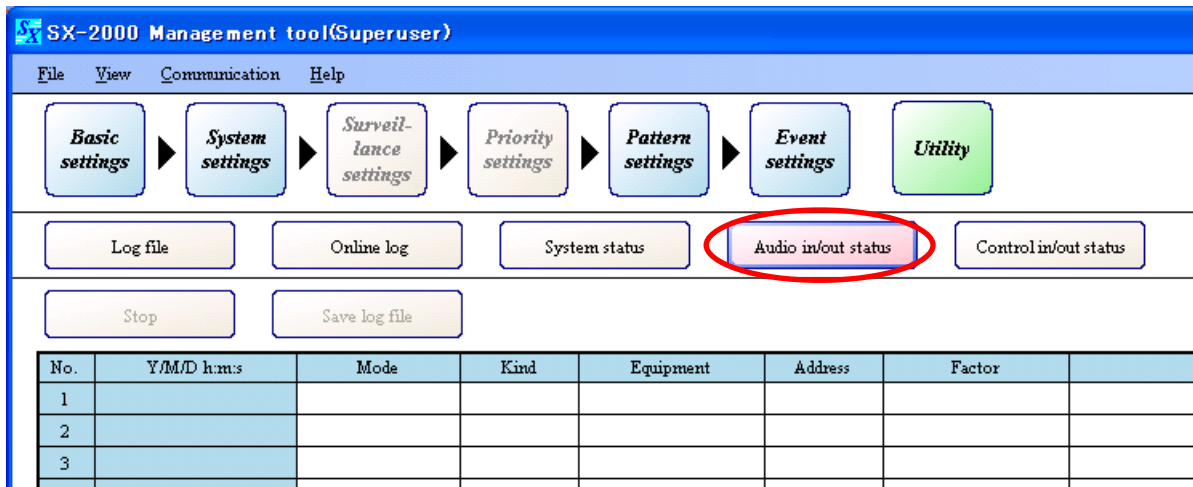
The SX-2000 system allows simultaneous 16-channel broadcasts using 16 audio buses.

A matrix display clearly shows which zones are currently broadcasting the audio input using the audio buses.

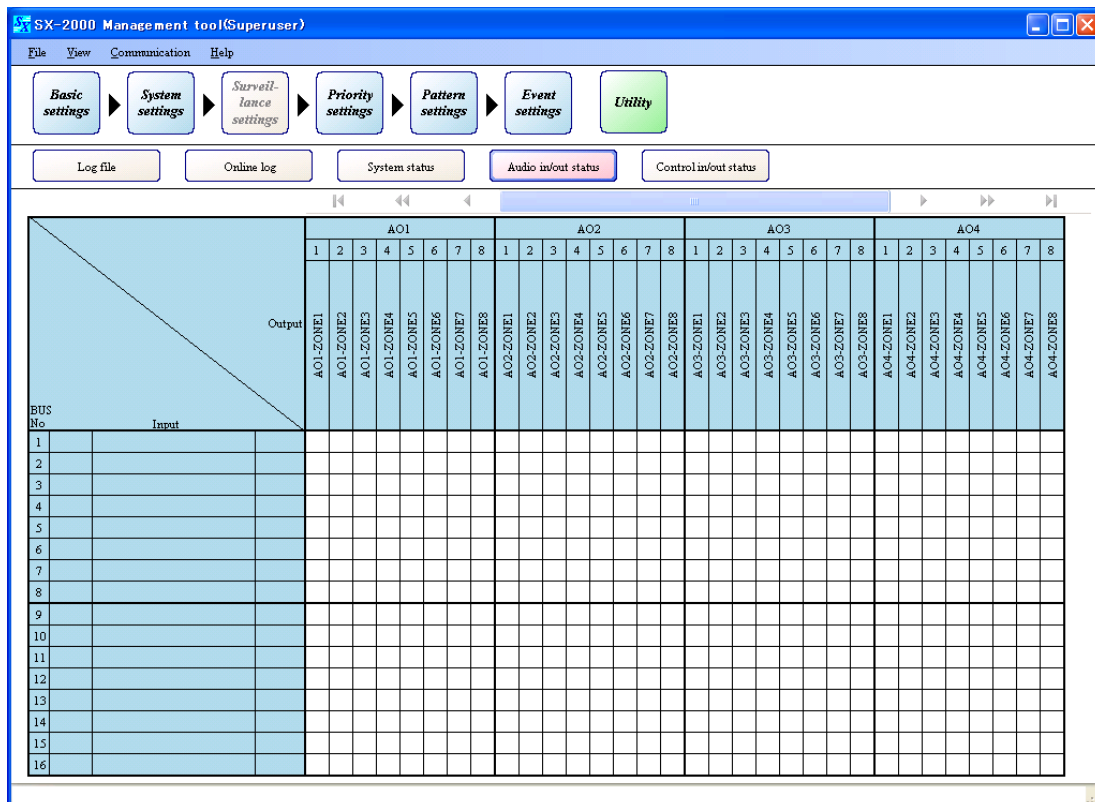
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to [p. 155 "Establishing Communications Between the SX-2000SM and a PC."](#)

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Press the [Audio in/out status] button on the Utility screen.



The audio input/output status display screen is displayed.



Audio input and output status data are automatically acquired.

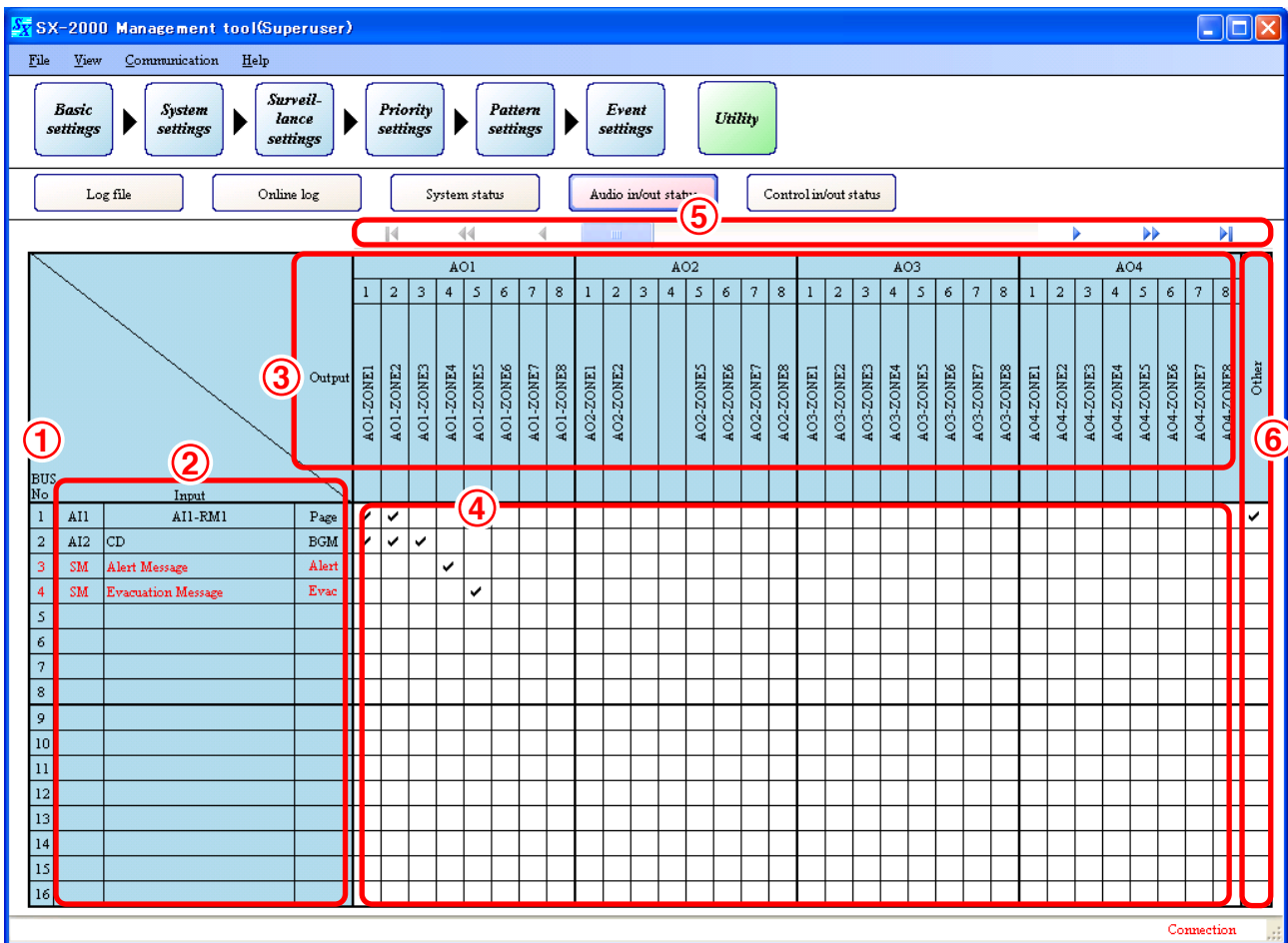


After the data have been received, the current status is displayed on the audio input/output status display screen.

After the audio input and output status data have been received, the latest system status is automatically updated and displayed.

				AO1								AO2								AO3								AO4								
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	Other
BUS No	Output			AO1-ZONE1	AO1-ZONE2	AO1-ZONE3	AO1-ZONE4	AO1-ZONE5	AO1-ZONE6	AO1-ZONE7	AO1-ZONE8	AO2-ZONE1	AO2-ZONE2	AO2-ZONE3	AO2-ZONE4	AO2-ZONE5	AO2-ZONE6	AO2-ZONE7	AO2-ZONE8	AO3-ZONE1	AO3-ZONE2	AO3-ZONE3	AO3-ZONE4	AO3-ZONE5	AO3-ZONE6	AO3-ZONE7	AO3-ZONE8	AO4-ZONE1	AO4-ZONE2	AO4-ZONE3	AO4-ZONE4	AO4-ZONE5	AO4-ZONE6	AO4-ZONE7	AO4-ZONE8	Other
	Input																																			
1	AI1	AI1-RM1	Page	✓	✓																															✓
2	AI2	CD	BGM	✓	✓																															
3	SM	Alert Message	Alert			✓																														
4	SM	Evacuation Message	Evac				✓																													
5																																				
6																																				
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15																																				
16																																				

### 13.4.1. Audio input/output status display screen



#### 1. BUS No.

Displays the audio bus numbers (1 – 16).

#### 2. Input

Displays information on audio entered for the bus number. The field remains blank when no signals are detected on the bus. Red character display indicates latest updated data.

Unit type and number

Unit type and number	Audio name	Audio type
AI1	AI1-RM1	Page
AI2	CD	BGM
SM	Alert Message	Alert
SM	Evacuation Message	Evac

#### • Unit type and number

Displays the type and number of the audio unit that has been input.

SM (SX-2000SM), AI1 – AI8 (SX-2000AI's or SX-2100AI's unit numbers 1 – 8)

#### • Audio name

Displays name of audio being input.

#### • Audio type

Displays the type of audio that has been input.

Page (General), BGM, EmgRM (Emergency RM), Alert, Evac (Evacuation), Reset

- Page (General): Broadcast of sound source type set for "General"
- BGM: Broadcast of sound source type set for "BGM"
- EmgRM (Emergency RM): Emergency microphone announcement from the remote microphone of sound source type set for "Emergency/General"
- Alert: EV message broadcast of sound source type set for "Alert"
- Evac (Evacuation): EV message broadcast of sound source type set for "Evacuation"
- Reset: EV message broadcast of sound source type set for "Reset"

### 3. Output

Displays the SX-2000AO or SX-2100AO, which becomes the audio output destination, and audio output zone names. Names are not displayed for zones not using the amplifier.

### 4. Matrix connection table

The "✓" indication is displayed in the position of the output zone(s) to which the input audio is being output.

### 5. Scroll bar

Scrolls the matrix table.

### 6. Other

The "✓" indication is displayed when audio is output to zones other than those currently displayed in the matrix connection table.

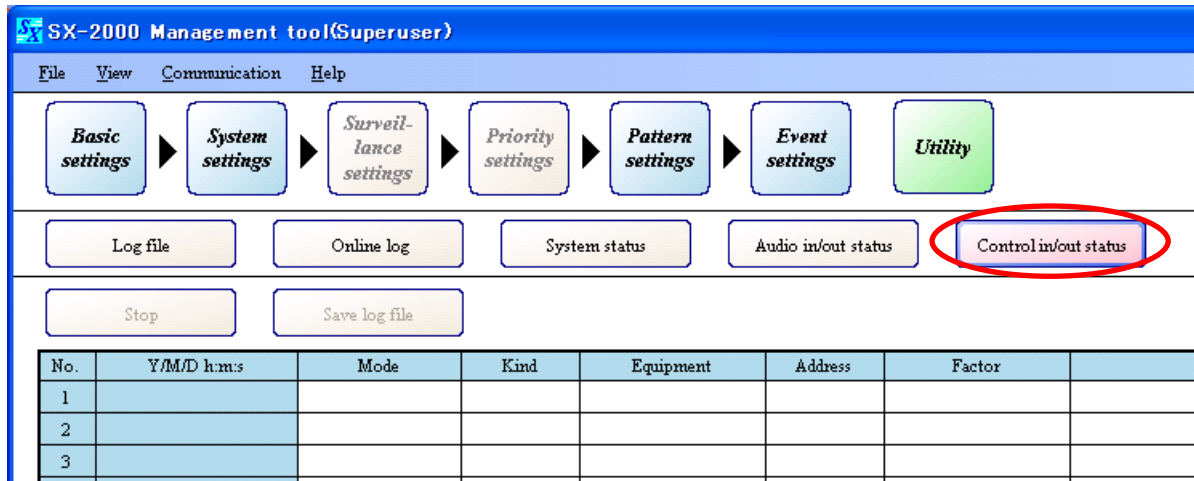
### 13.5. Control Input and Output Status Confirmation

The SX-2000 system control input and output statuses can be confirmed in real time.

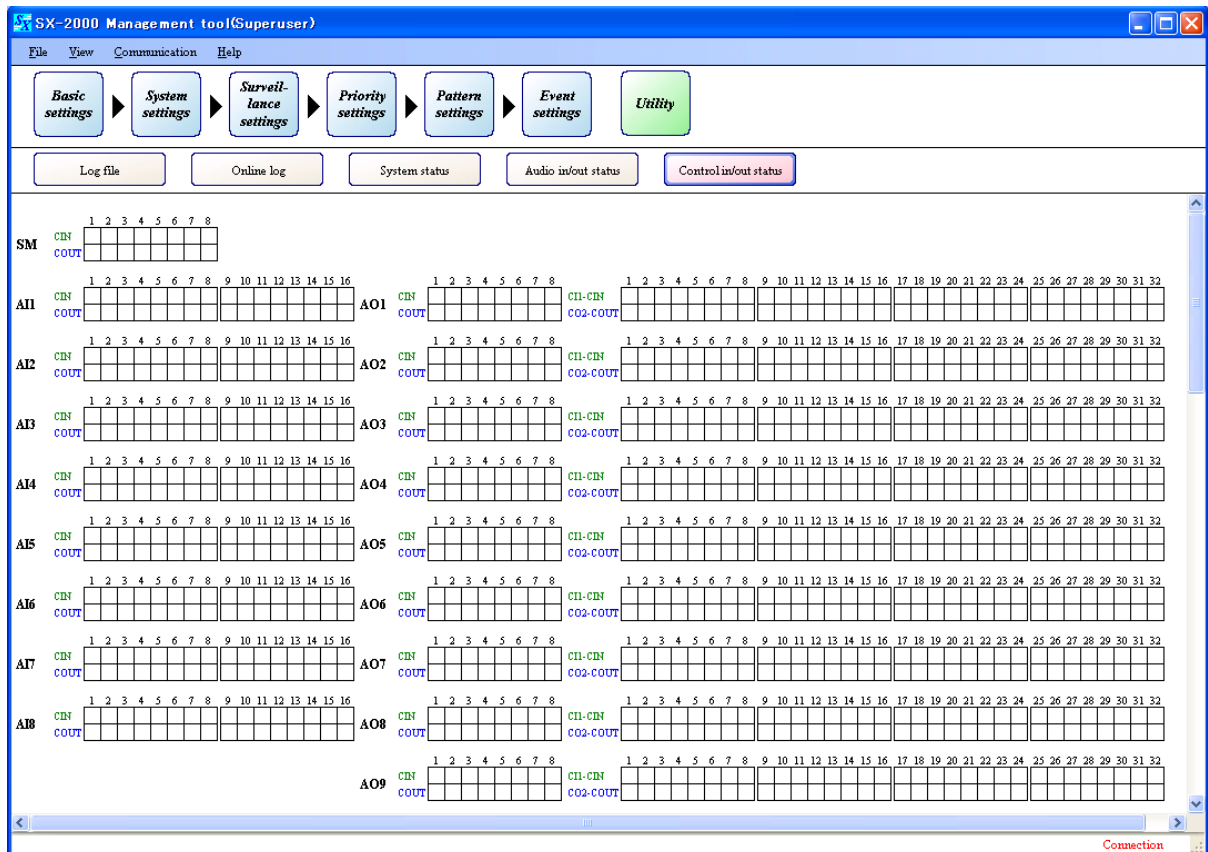
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software. For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Press the [Control in/out status] button on the Utility screen.



The control input/output status display screen is displayed.

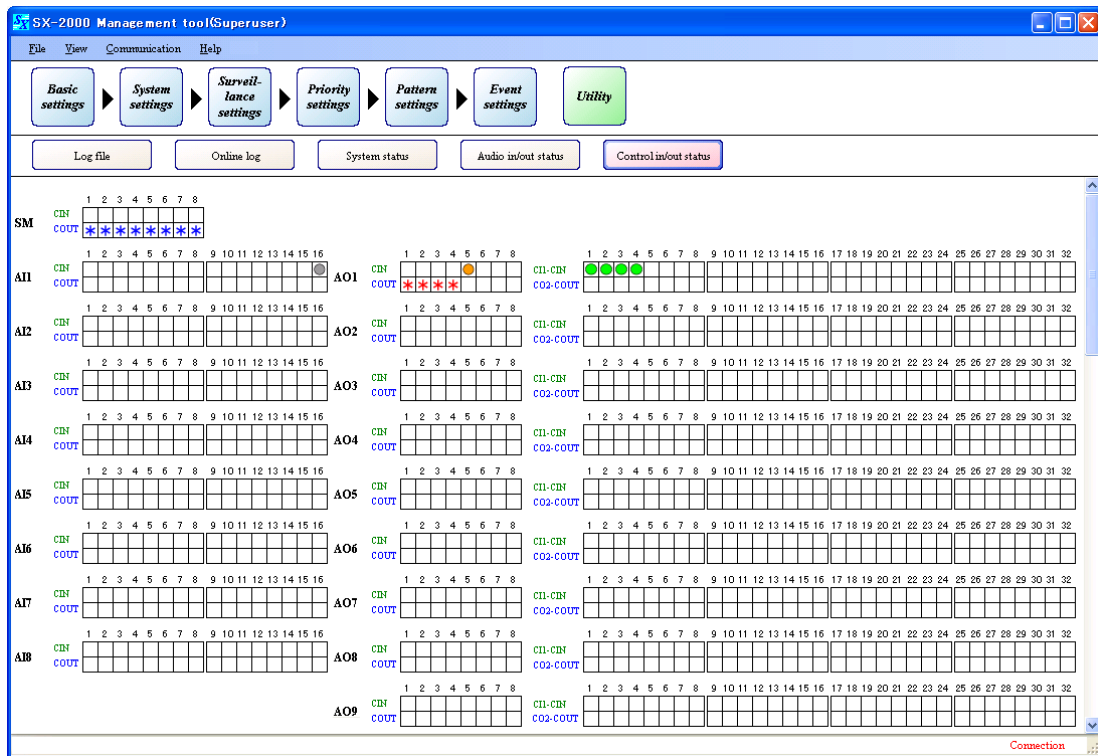


Control input and output status data are automatically acquired.



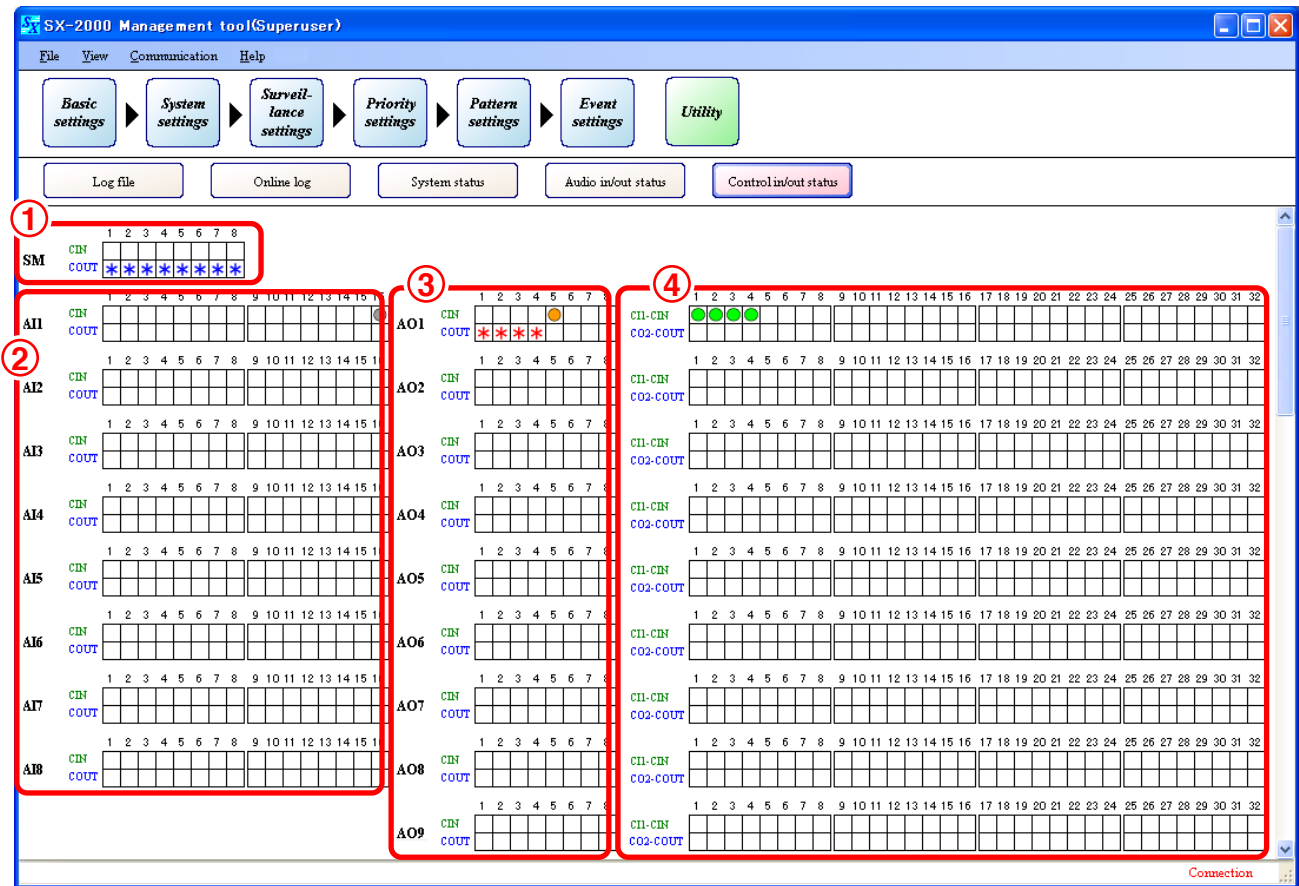
After the data have been received, the current status is displayed on the control input/output status display screen.

After the control input and output status data has been acquired, the latest system status is automatically updated and displayed.





### 13.5.1. Control input/output status display screen



#### 1. SM control input/output terminals

Display the SX-2000SM's control input and output statuses.

#### 2. AI control input/output terminals

Display the SX-2100AI's control input and output statuses.

(The SX-2000AI's status is not displayed, since it has no control input and output terminals.)

#### 3. AO control input/output terminals

Display the control input and output statuses of the SX-2000AO or SX-2100AO.

#### 4. CI/CO control input/output terminals

Display the control input and output statuses of the SX-2000CI and SX-2000CO.

The status of these units is not displayed if the SX-2000CI or SX-2000CO is not connected to the SX-2000AO or SX-2100AO.

If the control input (CIN) and control output (COUT) are turned ON, a mark is placed in their corresponding boxes.

When the control input closes ("makes"), the corresponding boxes are marked by circle (○).

● (green): The control input is closed. If the control input is closed by pulse signal, the color is displayed only while an event remains active.

● (orange): The control input terminal to which the external failure input has been assigned is closed. This indicates that the external connected device has failed.

● (gray): The control input terminal to which no functions have been assigned is closed.

When the control output turns on, the \* mark is placed in the corresponding boxes.

\* (blue): The control output is turned on.

\* (red): The control output corresponding to the zone for which attenuators were set to be "used" in emergency broadcasts is turned on.

## 14. COMMUNICATIONS BETWEEN THE SX-2000SM AND A PC

Setting data or log files can be acquired in real time or the system status can be monitored by connecting the SX-2000SM to a PC installed with the SX-2000 software.

### Notes

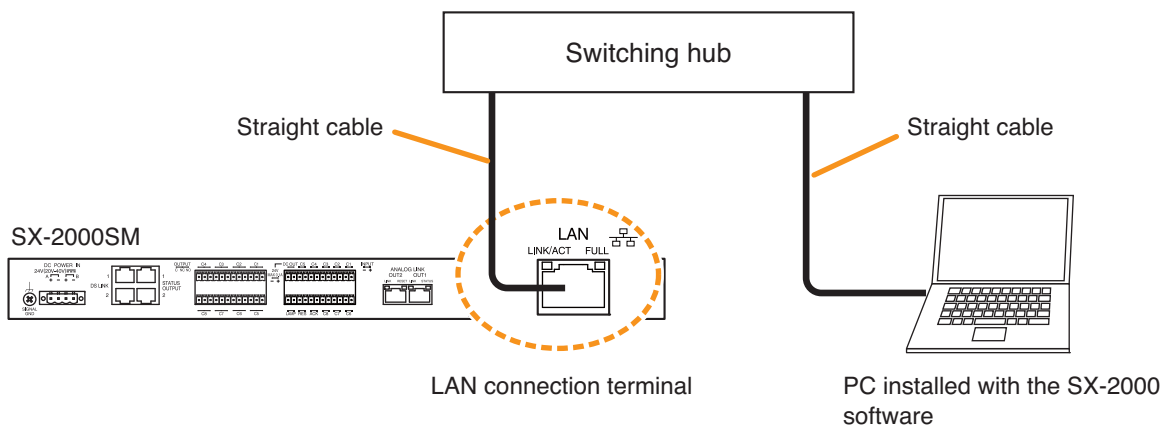
- When two or more SX-2000SMs are connected to a switching hub, communications may not be correctly established with the PC if their IP addresses are duplicated. Be sure to set different IP addresses for all SX-2000SMs connected to the switching hub and establish communications. (Refer to [p. 38 "Changing the SX-2000SM's Network Settings."](#))
- Multiple PCs cannot simultaneously access the same SX-2000SM.
- Network settings cannot be changed nor can the system be reset, even while communications are established, unless the network setting detection has been completed.
- Only SX-2000SMs of firmware version 3.0 or later can communicate with a PC. Since the latest firmware version for the SX-2000SM is made available on TOA's product download site (<http://toa-products.com/>), please download it for use.

## 14.1. Establishing Communications Between the SX-2000SM and a PC

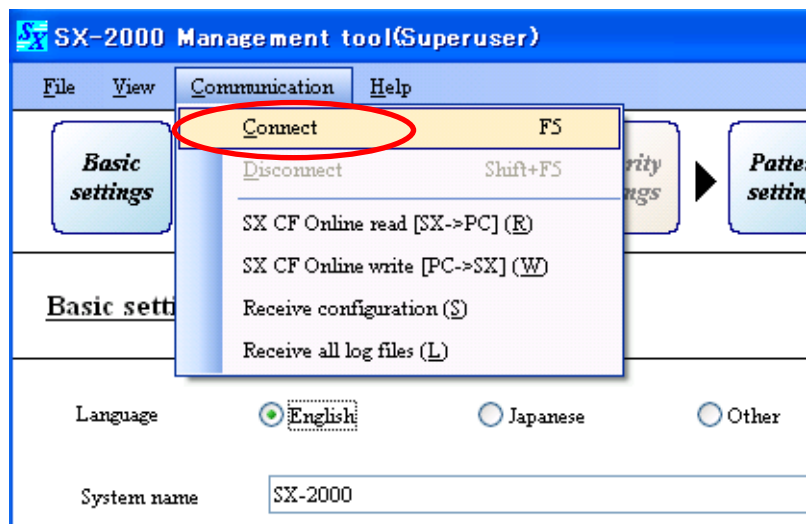
- Step 1.** Connect the SX-2000SM and the PC installed with the SX-2000 software to the switching hub.  
Connect the SX-2000SM's LAN connection terminal to a 10BASE-T- or 100BASE-TX-compatible switching hub.  
Use STP Category 5 Standard straight LAN cable fitted with RJ45 connectors.

### Notes

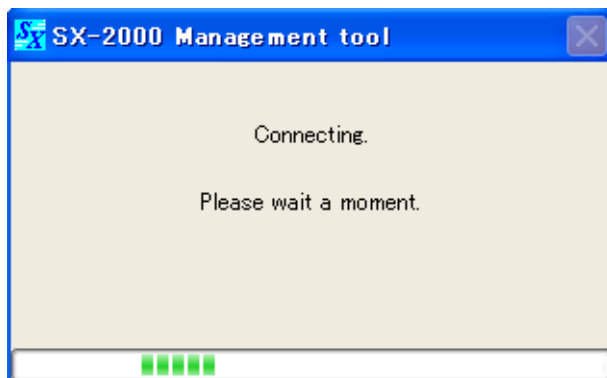
- Do not connect the switching hub to the LAN.
- Avoid directly connecting the SX-2000SM to the PC via a cross cable.



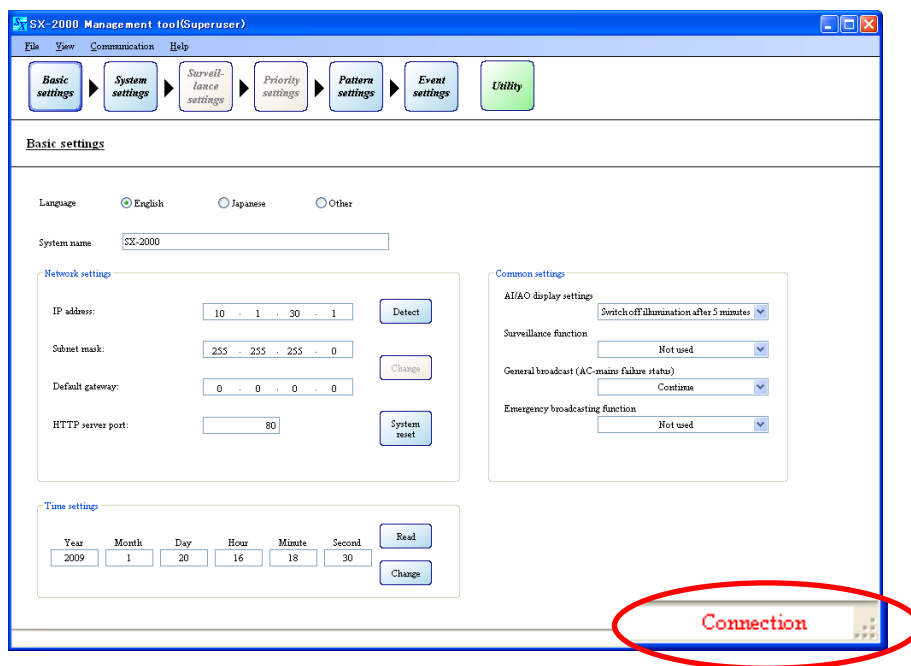
- Step 2.** Select [Communication → Connect] from the menu bar on the Setting Software.



The following window is displayed while communications are established.



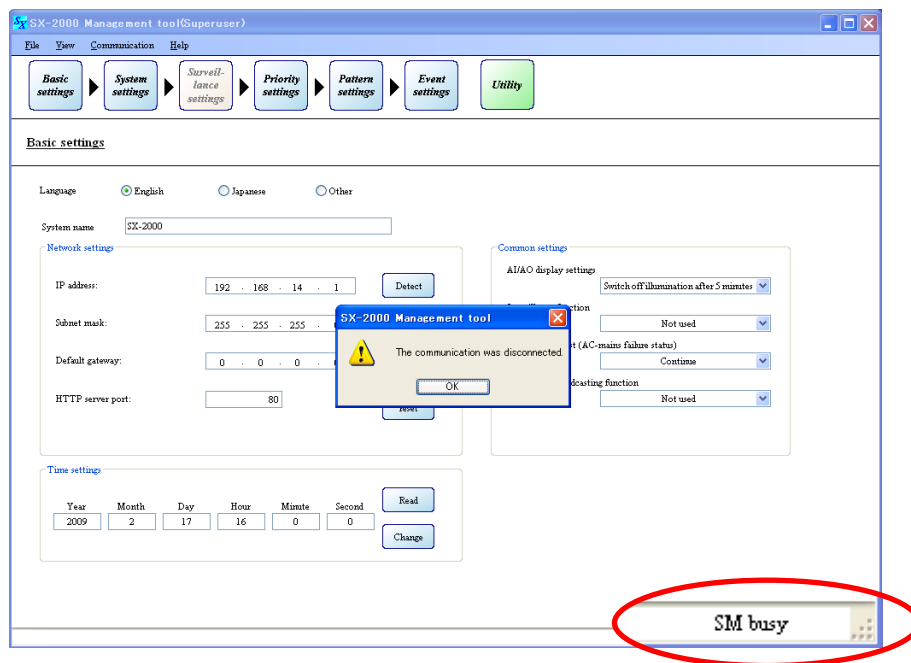
Communications are established between the SX-2000SM with IP address displayed in the network settings and a PC. After connection has been established, the "Connection" indication is displayed in the lower right corner of the screen.



### Note

If the system is reset or the LAN cable is removed during communications, the indication in the lower right corner of the screen changes to read: "SM busy."

Restoring communications automatically returns the indication to: "Connection."



## 14.2. Reading CF Card Setting Data Online

The PC can be loaded online with setting data stored on the CF card inserted into the SX-2000SM.

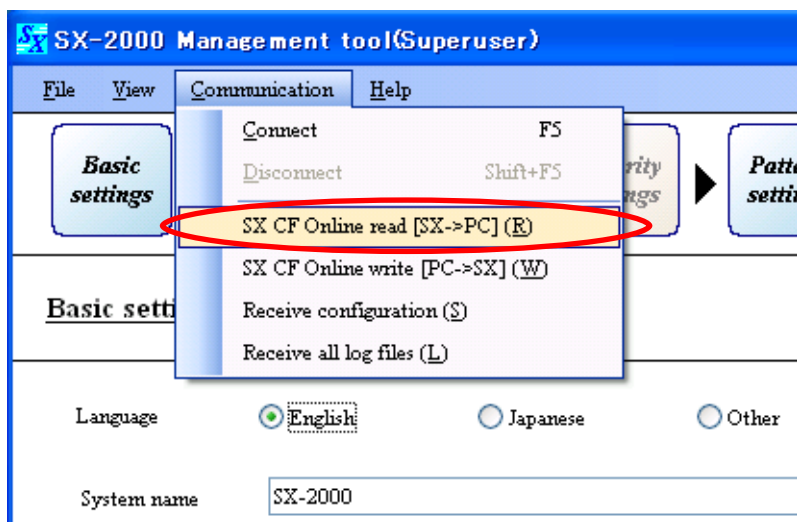
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

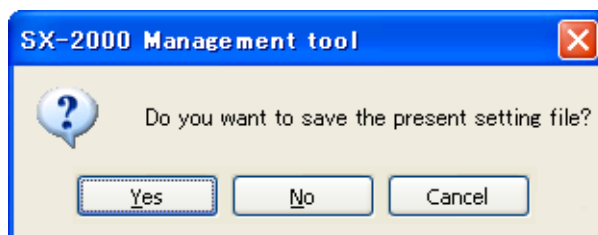
**Step 2.** Select [Communication → SX CF Online read (SX->PC) ] from the menu bar on the Setting Software.

**Note**

This selection cannot be made when the Utility screen (p. 120 "Utility") is displayed.



The following screen is displayed.

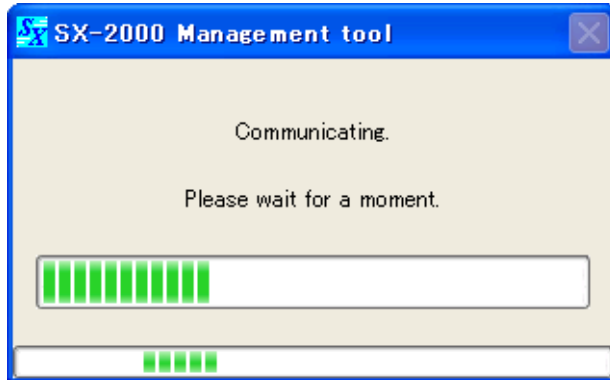


**Step 3.** Click the [Yes] or [No] button.

Clicking the [Yes] button allows the setting content currently being edited to be saved to a file. Loading begins after save is completed.

Clicking the [No] button causes loading to begin immediately.

The following screen is displayed during a read operation.



The following screen is displayed when the sound source data saved to the CF card and the sound source data registered in the setting software are the same.



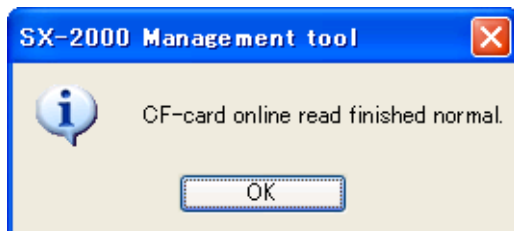
**Step 4.** To overwrite, click the [OK] button, and to transfer data other than EV messages, click the [Cancel] button.

**Note**

A little time may be required to transfer EV messages.

Clicking the [Cancel] button transfers all setting data except the EV messages, enabling reduction of transfer times.

The following screen is displayed after loading is completed.



**Step 5.** Press the [OK] button.

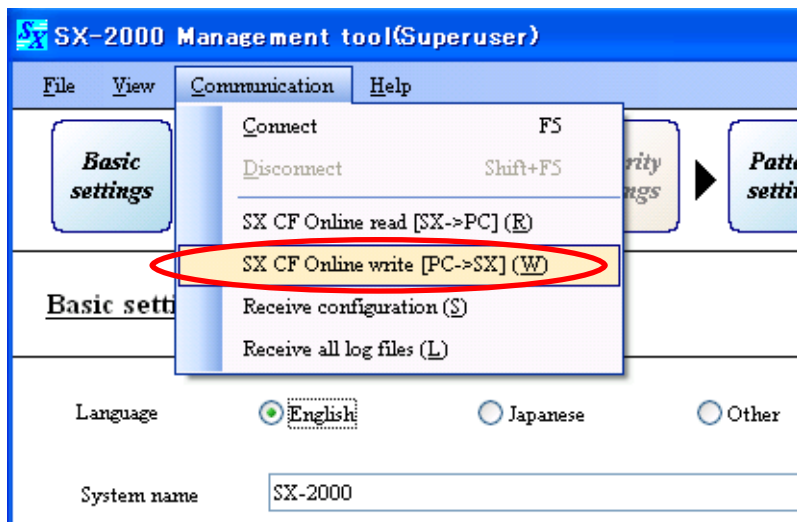
### 14.3. Writing Setting Data to the CF Card Online

Setting data created using the PC can be written online to the CF card inserted in the SX-2000SM.

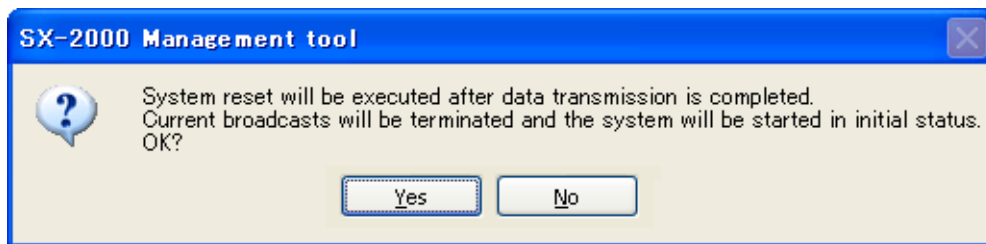
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Select [Communication → SX CF Online write (PC->SX) ] from the menu bar on the Setting Software.



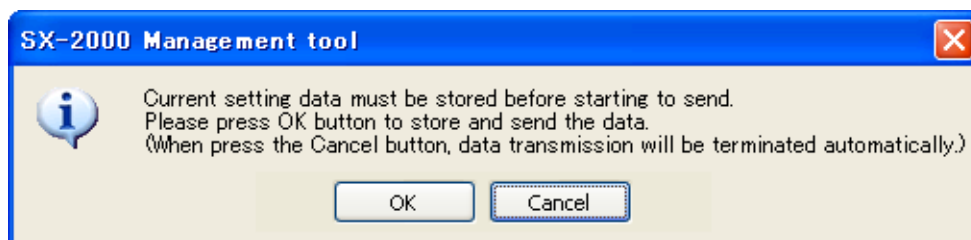
The following screen is displayed.



**Step 3.** Click the [Yes] button

**Tip:** Writing is not executed if the [No] button is clicked.

The following screen is displayed.



**Step 4.** Press the [OK] button.

**Tip:** Writing is not executed if the [Cancel] button is clicked.

The following screen is displayed and writing begins.



The following screen is displayed when the sound source data saved to the CF card and the sound source data registered in the setting software are the same.



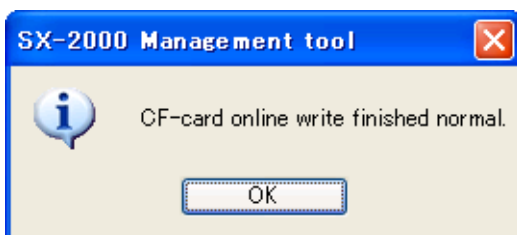
**Step 5.** To overwrite, click the [OK] button.

**Note**

A little time may be required to transfer EV messages.

Clicking the [Cancel] button transfers all setting data except the EV messages, enabling reduction of transfer times.

The following screen is displayed after writing is completed.



**Step 6.** Press the [OK] button.



## 14.4. Acquiring System Configuration Data Online

The SX-2000 system's configuration data can be acquired online.  
This function is useful when creating setting data after equipment installation.

### Note

Only the component number and type can be acquired for system configuration data.  
Other detailed equipment settings are default values.

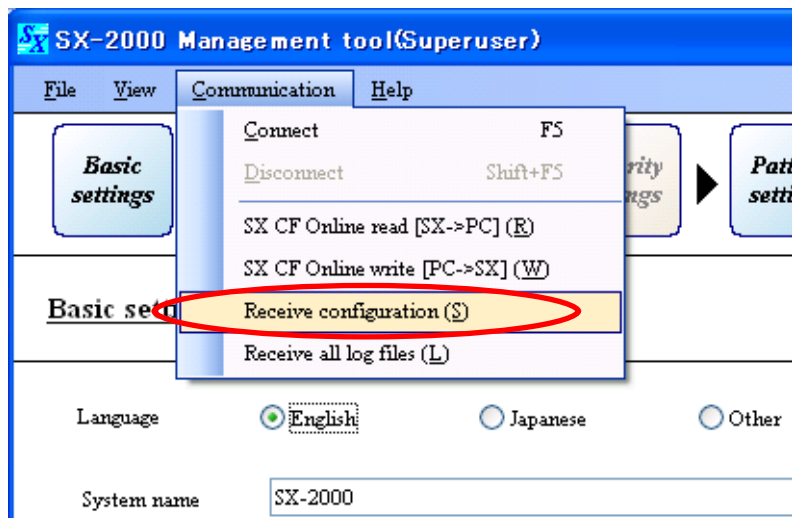
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to [p. 155 "Establishing Communications Between the SX-2000SM and a PC."](#)

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

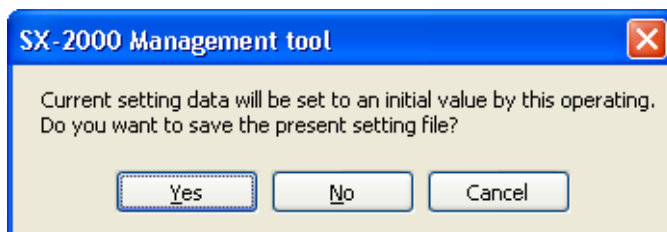
**Step 2.** Select [Communication → Receive configuration] from the menu bar on the Setting Software.

### Note

This selection cannot be made when the Utility screen ([p. 120 "Utility"](#)) is displayed.



The following screen is displayed during data edit.



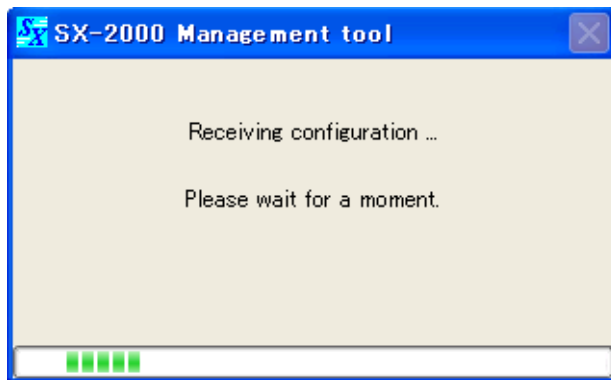
**Step 3.** Click the [Yes] or [No] button.

Selecting the [Yes] button allows the setting content currently being edited to be saved to a file. Configuration data acquisition begins after the setting content has been saved. Configuration data acquisition begins immediately if the [No] button is selected.

**Note**

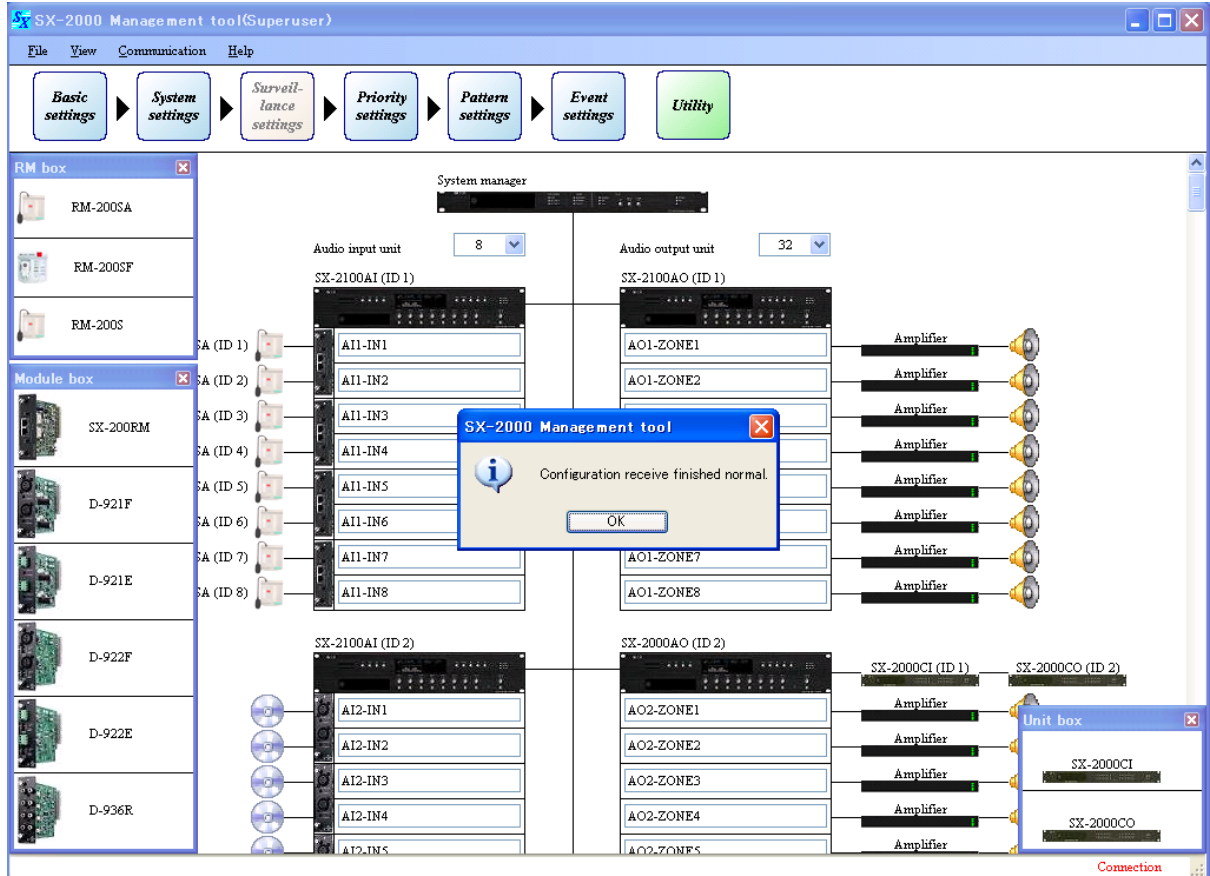
Even if the [Yes] or [No] button is selected, the setting content currently being edited is not retained, making the system configuration the same as the current equipment connection status. Settings other than the acquired configuration data revert to default values.

The following screen is displayed and the system configuration data is received.



After reception completion, the display reverts to the system setting screen.

A reception completion dialog and the current system configuration are displayed on the system setting screen.



## 14.5. Acquiring All Log Files Stored on the CF Card

All operation and failure log data stored on the CF card inserted in the SX-2000SM can be acquired online.

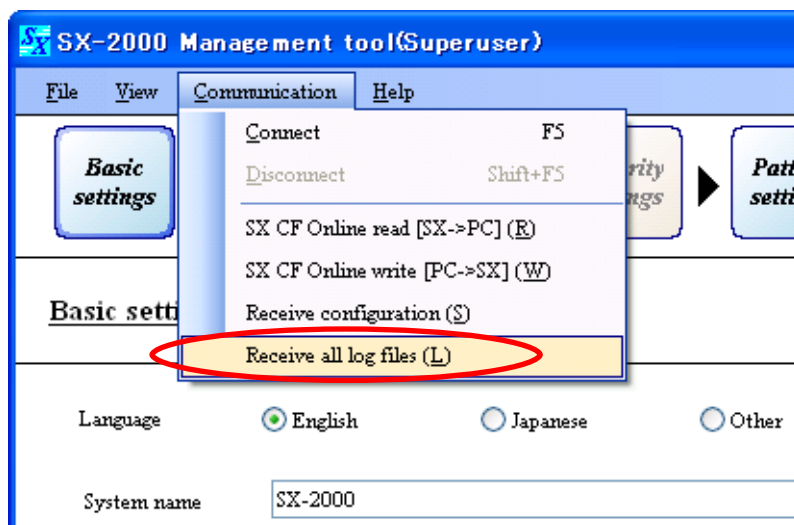
**Step 1.** Establish communications between the SX-2000SM and the PC installed with the SX-2000 software.  
For the procedure for establishing communications, refer to p. 155 "Establishing Communications Between the SX-2000SM and a PC."

The "Connection" indication is displayed in the lower right corner of the screen after the connection is completed.

**Step 2.** Select [Communication → Receive all log files] from the menu bar on the Setting Software.

### Note

This selection cannot be made when the Utility screen (p. 120 "Utility") is displayed.



A "Browse For Folder" dialog is displayed.



**Step 3.** Select the folder to receive the file, then click the [OK] button.

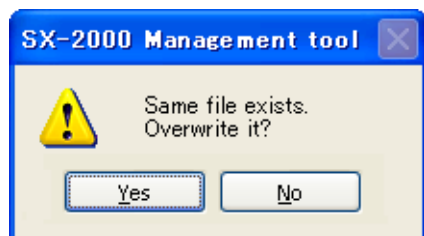
**Note**

The filename Sx2kOp\*\*.s2l is automatically assigned to operation log data and Sx2kFa\*\*.s2l to failure log data, then they are stored on the CF card. The numbers 00 through 99 are entered in the \*\* part in the order that the data was stored.

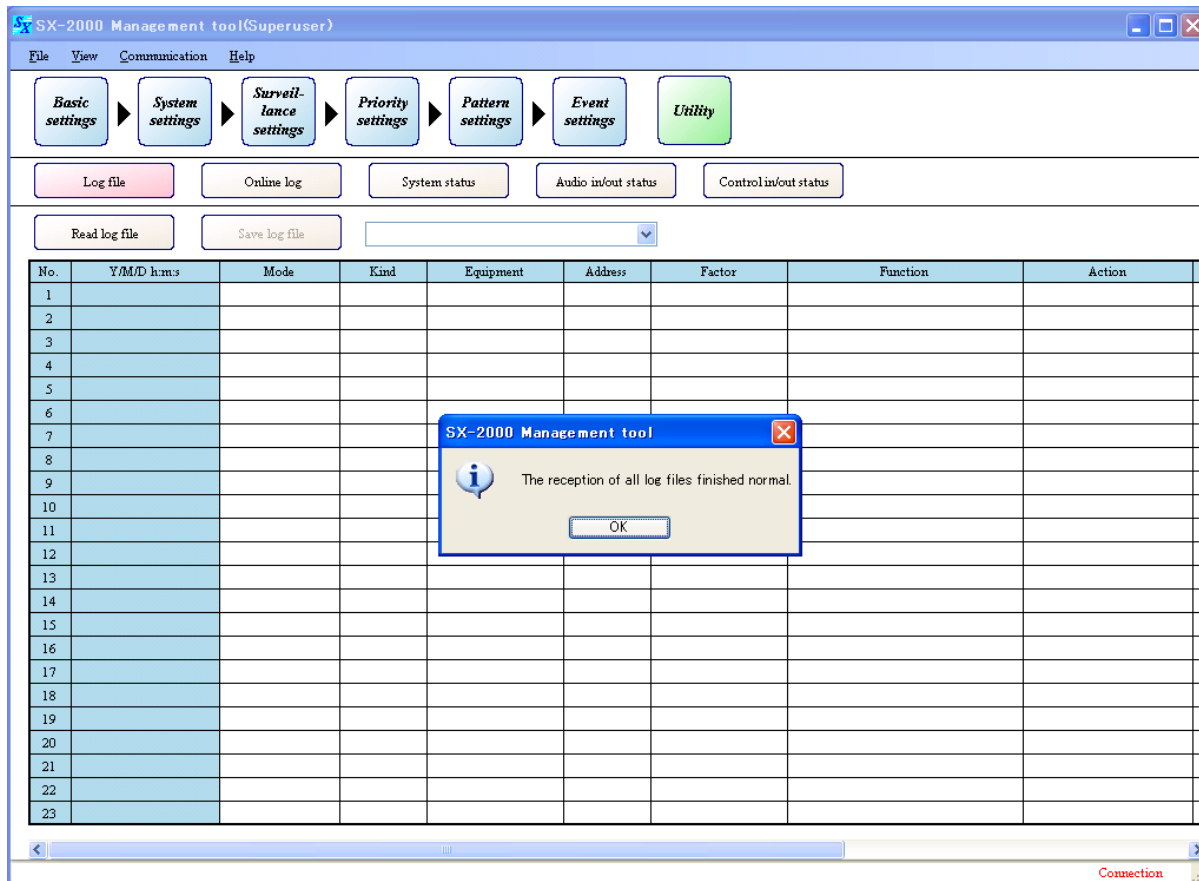
A screen showing that the data is being stored is displayed.



Occasionally the following screen may be displayed, depending on the target folder.

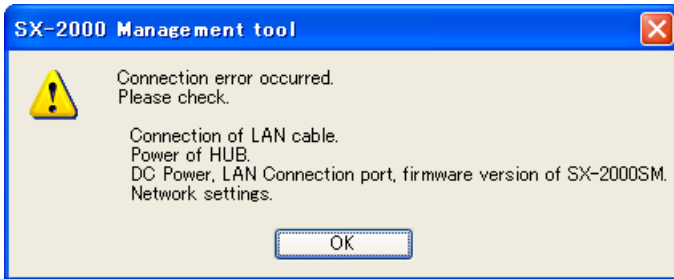


After all log files have been acquired, the display switches to the log file display screen. A dialog indicating completion of all log files acquisitions is displayed along with the log file display screen.

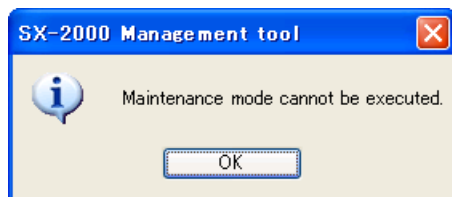


## 14.6. When Communications Connection Errors Occur

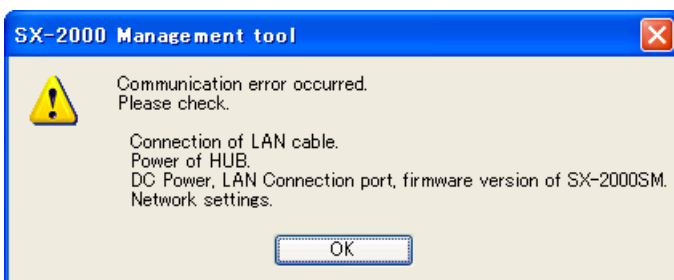
If communications cannot be established between the SX-2000SM and the PC, the following screen is displayed. In such cases, the following possible causes may be considered.



- LAN cables are not connected.
- Not straight cable but cross cable is connected.
- STEP Category 5 straight cable fitted with RJ45 connectors is not used.
- Power is not supplied to the switching hub.
- The SX-2000SM and the switching hub are more than 100 m apart.
- Power is not being supplied to the SX-2000SM.
- Cable is not connected to the SX-2000SM's LAN connector.
- The SX-2000SM's firmware version is 3.00 or earlier.
- Incorrect settings of the IP address, subnet mask, default gateway or HTTP server port of the SX-2000SM or PC.



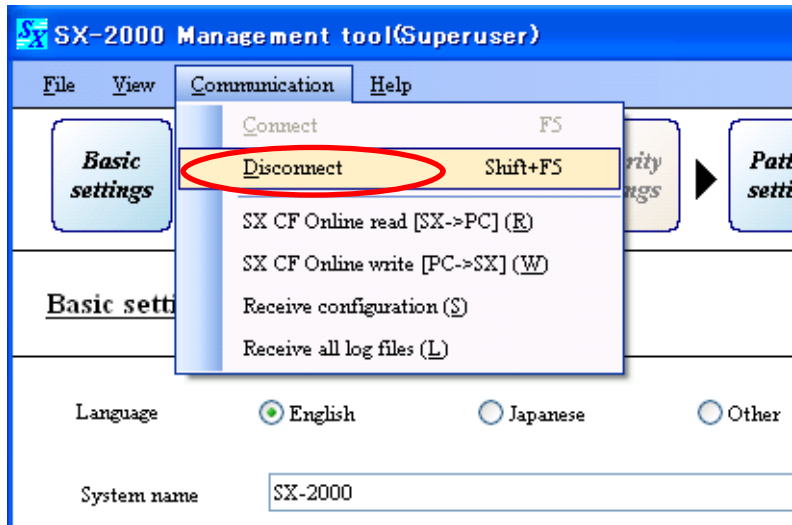
- The CF card is not inserted.
- The SX-2000SM's DIP switch 2 or 3 is set to ON.
- EV messages are being played back.
- Emergency broadcasts are in progress.



- The CF card was removed during communications.
- The SX-2000SM's DIP switch 2 was switched to ON during communications.
- A LAN cable was disconnected during communications.
- The power to the switching hub or other component turned off during communications.
- The SX-2000SM is in the process of initialization.
- The SX-2000SM's firmware version is 3.00 or earlier.
- Incorrect settings of the IP address, subnet mask, default gateway or HTTP server port of the SX-2000SM or PC.

## 14.7. Cutting Off Communications Between the SX-2000SM and a PC

**Step 1.** Select "Communication → Disconnect" from the menu bar when communications are established between the SX-2000SM and the PC.



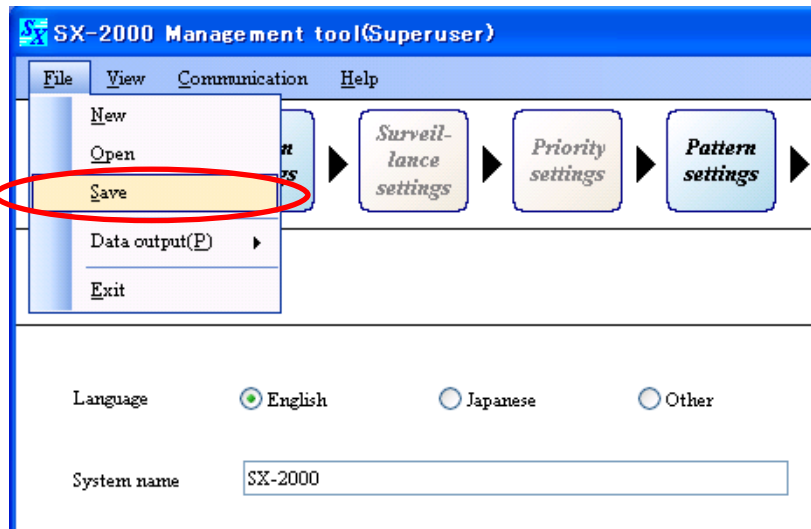
The "Connection" indication displayed in the lower right corner of the screen goes off.

## 15. SAVING THE SETTINGS FILE

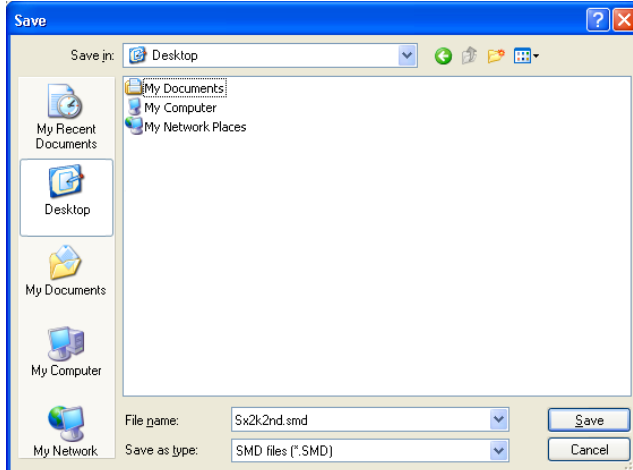
Output the data set using the Setting Software as a file (smd file format), which is usable by the SX-2000 system.

Save this settings file to a CF card and allow the SX-2000SM to read this card in order to begin operation of the system. (For the method of using the SX-2000SM to read the settings file, see the separate Operating Instructions, "Operating Settings Data.")

**Step 1.** Select [File → Save] from the menu bar on the Setting Software.



A "Save As" dialog is displayed.



**Step 2.** Using the "Save in" pull-down menu, select the drive assigned to the CF card.

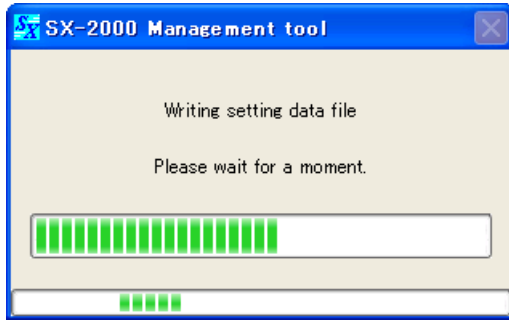
**Step 3.** Set a "File name."

### Notes

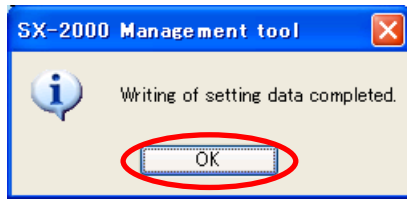
- The filename "Sx2k2nd.smd" is assigned by default.
- When using the SX-2000SM to read a CF card, be sure to use the filename "Sx2k2nd.smd." Setting data cannot be read if a different filename is used.

**Step 4.** Press the [Save] button.

Write of the setting data starts.  
The screen below is displayed during data write.



The screen below is displayed after the data write has been completed.



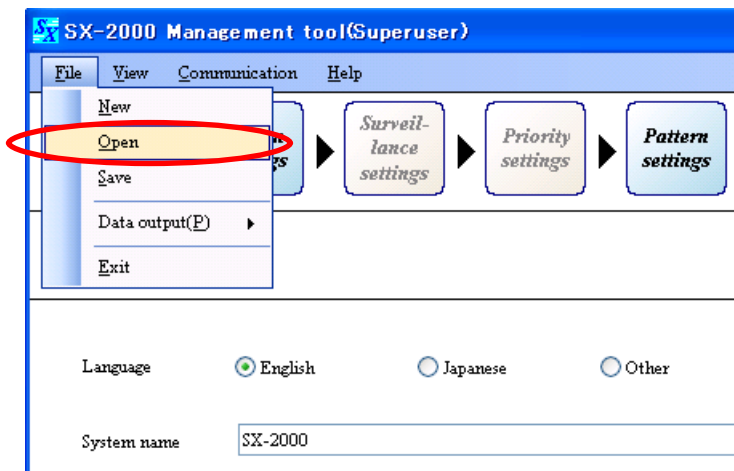
**Step 5.** Press the [OK] button.



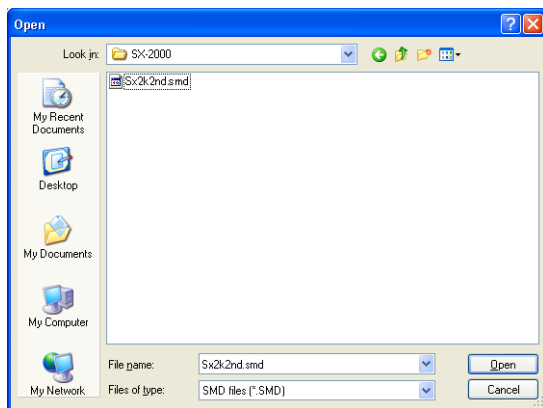
## 16. READING THE SETTINGS FILE

Read the saved settings file into the Setting Software.

**Step 1.** Select [File → Open] from the menu bar on the Setting Software.



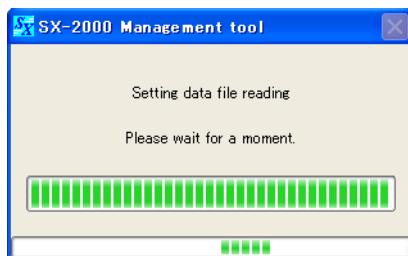
An "Open" dialog is displayed.



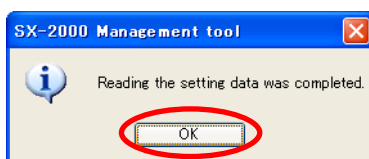
**Step 2.** Designate the folder where the settings file is saved, and select the file, then press the [Open] button.

Read of the settings file starts.

The screen below is displayed during file read.



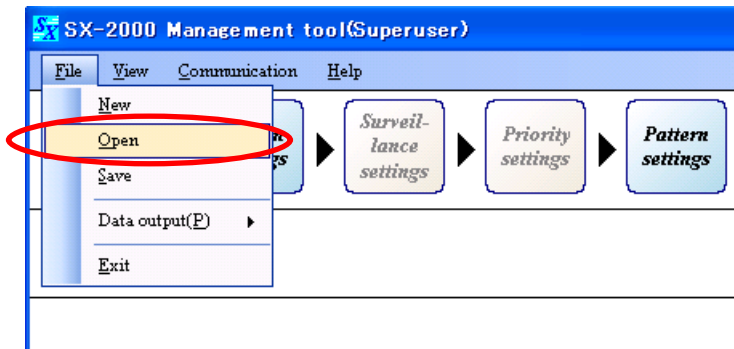
The screen below is displayed after the file read has been completed.



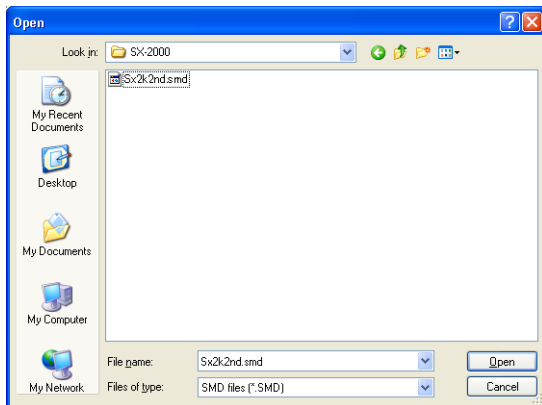
**Step 3.** Press the [OK] button.

**[When reading the old version Settings file (s2d format)]**

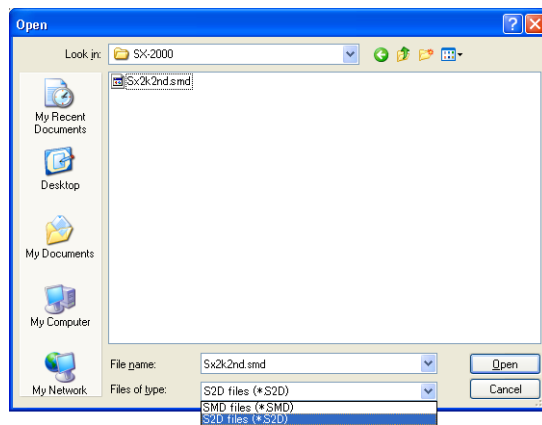
**Step 1.** Select [File → Open] from the menu bar on the Setting Software.  
An "Open" dialog is displayed.



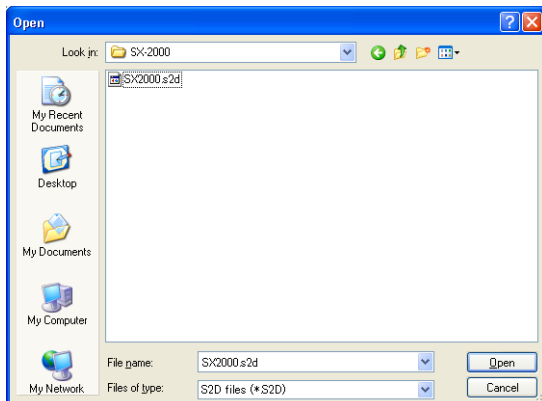
An "Open" dialog is displayed.



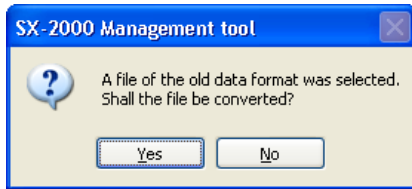
**Step 2.** Select "S2D files (\*.S2D)" in the File type box.



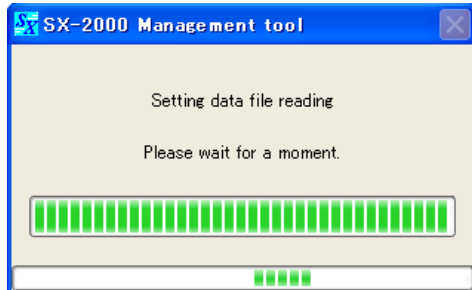
**Step 3.** Select the SX-2000 Settings data saved in the form of a file with the extension "s2d," then click the [Open] button.



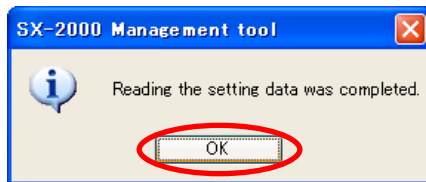
**Step 4.** When the screen below is displayed, click the [Yes] button.



This starts Setting file reading. The screen below is displayed during a read operation.



The screen below is displayed after settings file reading is complete.



**Step 5.** Click the [OK] button.

**Note**

Reading the settings data saved in the "s2d" file format causes the following settings items to be automatically converted.

**[Remote Microphone's chime volume setting]**

The setting range of the Remote Microphone's chime volume is from 0 to -20 dB (in 1 dB steps) for the old version Setting Software and from 0 to -20 dB (in 2 dB steps) for the new Setting Software.

If the old parameter is an odd number, the new one becomes the value increased by 1 from that old parameter.

(Example)

	Before conversion (s2d format)	After conversion (smd format)
Chime volume	0 dB	0 dB
	-1 dB	0 dB
	-15 dB	-14 dB
	-20 dB	-20 dB

**[Priority level settings]**

The priority level parameters on the new Setting Software become the values increased by 257 from those set using the old version Setting Software.

	Before conversion (s2d format)	After conversion (smd format)
Priority level	0	257
	10	267

**[Output zone pattern settings]**

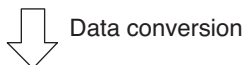
For the general broadcast patterns and RM zone selection patterns set using the old version Setting Software, only their pattern names and output destination zones are converted as output zone patterns on the new Setting Software.

If there exist the patterns assigned different names and input sound sources but assigned the same output destination using the old version Setting Software, their output zone pattern names are converted in the following priority order: "General broadcast pattern" > "RM zone selection pattern" and "Smaller pattern No." > "Larger patter No."

Setting data set on the old version Setting Software

Pattern	Pattern name	Sound source	Output destination
General broadcast pattern 1	PAGE_PTN1	AI1 CH5	AO1-AO2 ZONE1
General broadcast pattern 2	PAGE_PTN2	AI1 CH5	AO1-AO2 ZONE2
⋮	⋮	⋮	⋮
General broadcast pattern 7	PAGE_PTN7	AI1 CH5	AO1-AO2 ZONE7
General broadcast pattern 8	PAGE_PTN8	AI1 CH5	AO1-AO2 ZONE1-ZONE8
General broadcast pattern 9	PAGE_PTN9	AI1 CH6	AO1-AO2 ZONE1
General broadcast pattern 10	PAGE_PTN10	AI1 CH6	AO1-AO2 ZONE2
⋮	⋮	⋮	⋮
General broadcast pattern 16	PAGE_PTN16	AI1 CH6	AO1-AO2 ZONE1-ZONE8
RM zone selection pattern 1	RM_PTN1	—	AO1-AO2 ZONE1-3-5-7
RM zone selection pattern 2	RM_PTN2	—	AO1-AO2 ZONE2-4-6-8
⋮	⋮	⋮	⋮
RM zone selection pattern 128	RM_PTN128	—	AO1-AO2 ZONE1-ZONE8

If there exist the patterns assigned different pattern names and input sound sources but assigned the same output destination, the new pattern(s) will be created by avoiding duplication of output zone patterns. In this example, as the patterns' output destinations in red are duplicated with those listed above, these patterns will not be converted into the new Setting Software data according to the said conversion order rule.



Setting data on the new version Setting Software

Pattern	Pattern name	Output destination
Output zone pattern 1	PAGE_PTN1	AO1-AO2 ZONE1
Output zone pattern 2	PAGE_PTN2	AO1-AO2 ZONE2
⋮	⋮	⋮
Output zone pattern 7	PAGE_PTN7	AO1-AO2 ZONE7
Output zone pattern 8	PAGE_PTN8	AO1-AO2 ZONE1-ZONE8
None		
None		
⋮	⋮	⋮
None		
Output zone pattern 9	RM_PTN1	AO1-AO2 ZONE1-3-5-7
Output zone pattern 10	RM_PTN2	AO1-AO2 ZONE2-4-6-8
⋮	⋮	⋮
None		

Only the patterns of which output destinations are not duplicated in the general broadcast patterns and RM zone selection patterns can be reflected as output destination zone patterns in the settings data on the new Setting Software. Their pattern names remain unchanged.

**[Event settings]**

The following functions set in the "Control input settings" or "RM function key settings" using the old version of the Setting Software are automatically converted.

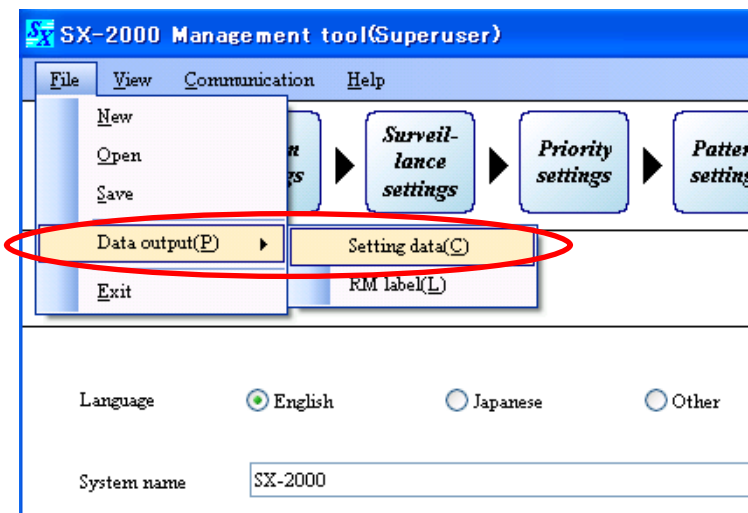
No.	Before conversion (s2d format)	After conversion (smd format)
(1)	Volume change (UP, Pulse)	Zone volume adjustment (Pulse)
(2)	Volume change (DOWN, Pulse)	Zone volume adjustment (Pulse)
(3)	Volume change (UP, Level)	None (Inconvertible)
(4)	Volume change (DOWN, Level)	Zone volume attenuation (Level)

**Note**  
Functions of (1), (2), and (4) at left may become "None" after conversion depending on amount of volume change made before conversion.

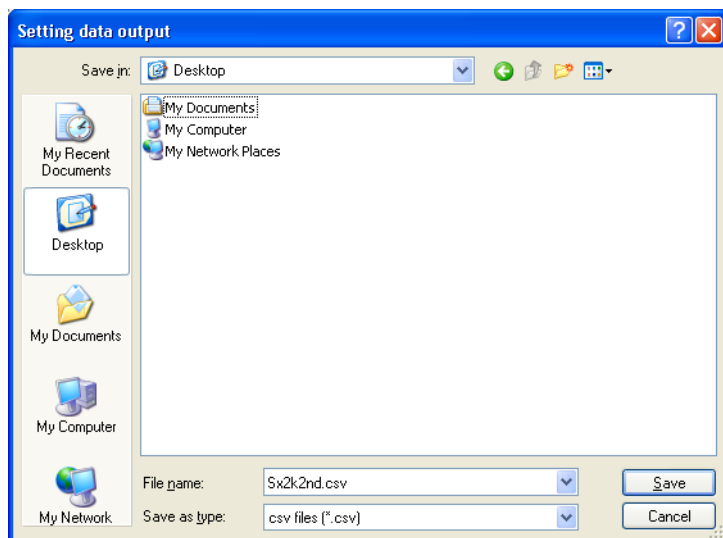
## 17. PRINTING SETTINGS DATA

Settings data can be output as data file in CSV format, which then can be printed.

**Step 1.** Select [File → Data output → Settings data] from the menu bar on the Setting Software.



A "Setting data output" dialog is displayed.



**Step 2.** Using the "Save in" pull-down menu, select the folder where the settings file to be printed is saved.

**Step 3.** Set a "File name."

### Note

The filename "Sx2k2nd.csv" is set by default.

When changing the filename, be sure to add a filename extension (csv).

Example: 0605setting\_file.csv

- Step 4.** Press the [Save] button.  
This starts saving the setting data.  
The screen below is displayed during data save.



The screen below is displayed when the save has finished.



- Step 5.** Press the [OK] button to close the screen.

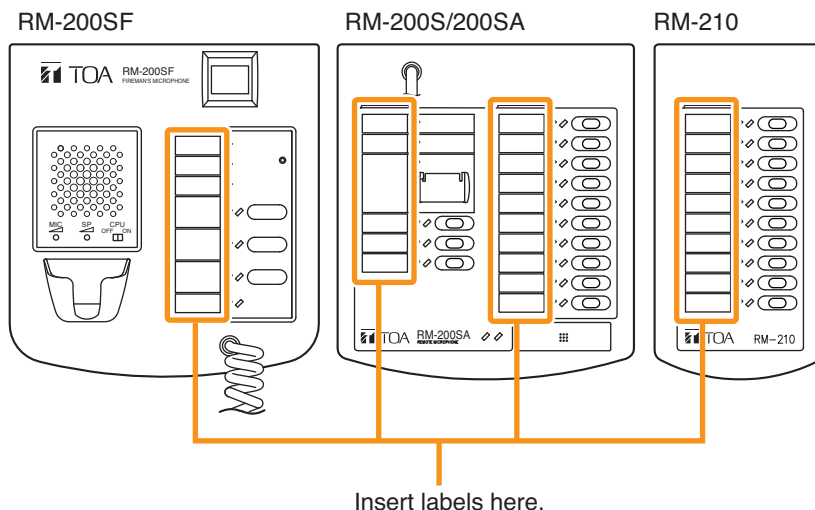
- Step 6.** Open the saved .csv file and print.

## 18. PRINTING LABELS FOR REMOTE MICROPHONES

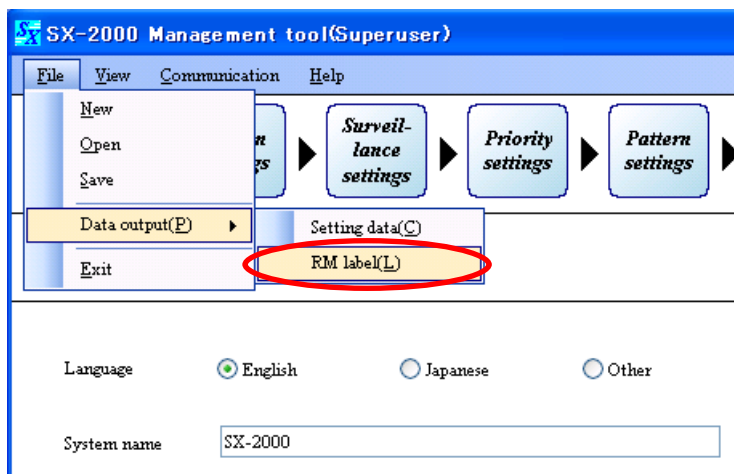
To print a label for a Remote Microphone, first use the Setting Software to output the microphone's function key assignments to an Excel file (book).

### Note

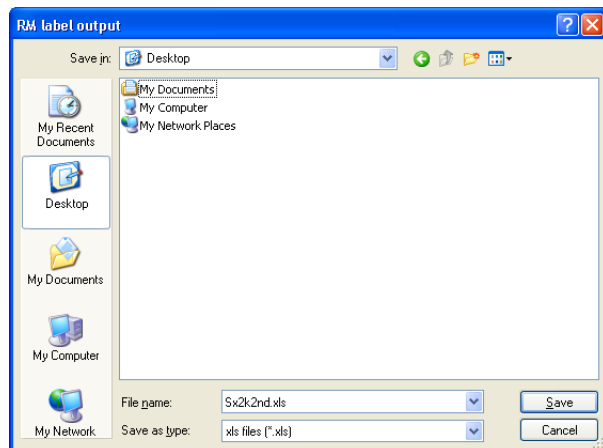
Printing this label will require that Excel has been installed and configured correctly on the PC.



**Step 1.** Select [File → Data output → RM label] from the menu bar on the Setting Software.



An "RM label output" dialog is displayed.



**Step 2.** Using the "Save in" pull-down menu, select the folder where the data for label print is to be saved.

**Step 3.** Set a "File name."

**Notes**

- The filename "sx2k2nd.xls" is assigned by default.
- When changing the filename, be sure to add a filename extension (xls).  
Example: 0605rm\_label.xls

**Step 4.** Press the [Save] button.

Read of the data for printing labels starts.

The screen below is displayed during data read.



The screen below is displayed after the data read has been completed.



Based on their ID numbers, separate worksheets are produced in the resulting Excel file (book) for each RM-200SF or RM-200SA unit connected to the SX-2000AI or SX-2100AI.

The initial printing range for each ID number is 1 page for the RM-200SF or RM-200SA. It is also 1 page for the RM-210 when an RM-210 is connected to the RM-200SF or RM-200SA, and this applies even if multiple RM-210 units are connected.

**Step 5.** Open the saved .xls (Excel) file and print.

**Notes**

- The actual print area and the width of the printed label may vary slightly depending on the type of printer used.
- If the labels cannot be printed out correctly, refer to the separate Installation Manual, "Creating remote microphone name labels."
- The paper used for the name label must be under 0.2 mm in thickness.



[Print image of RM-200SA/210]

First page (RM-200SA)

A11-RM2	
RM-200SA L	RM-200SA R
POWER	KEY1
FAULT	KEY2
	KEY3
EMGKEY	KEY4
	KEY5
SYSKEY1	KEY6
SYSKEY2	KEY7
SYSKEY3	KEY8
	KEY9
	KEY10

Second page (RM-210)

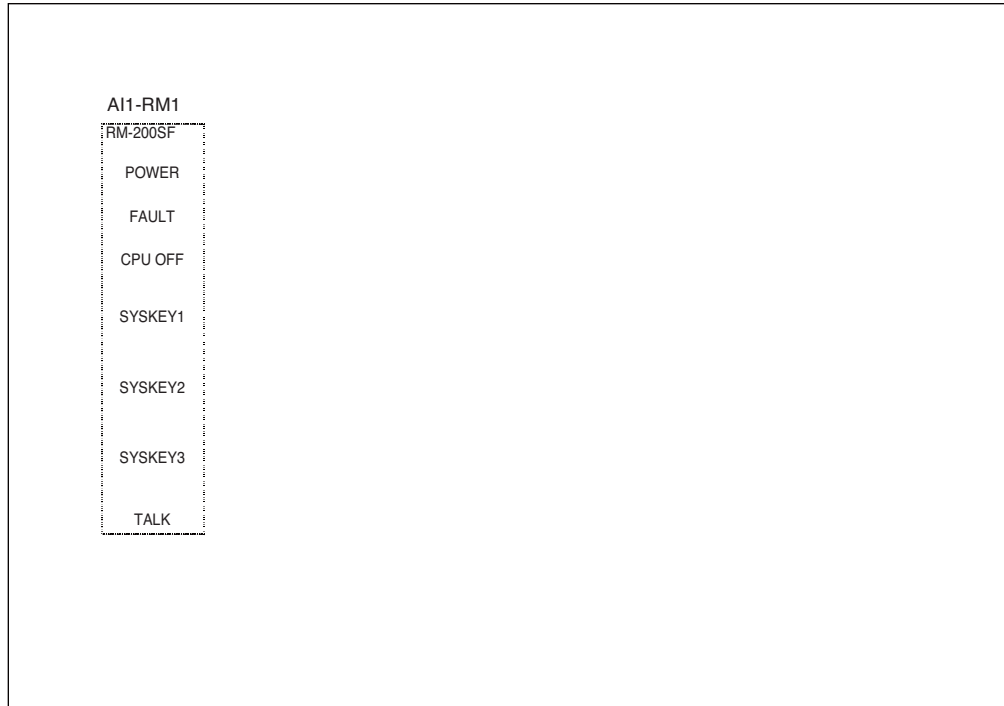
A11-RM2			
RM-210 1	RM-210 2	RM-210 3	RM-210 4
KEY11	KEY21		
KEY12	KEY22		
KEY13	KEY23		
KEY14	KEY24		
KEY15	KEY25		
KEY16	KEY26		
KEY17	KEY27		
KEY18	KEY28		
KEY19	KEY29		
KEY20	KEY30		

**Note**

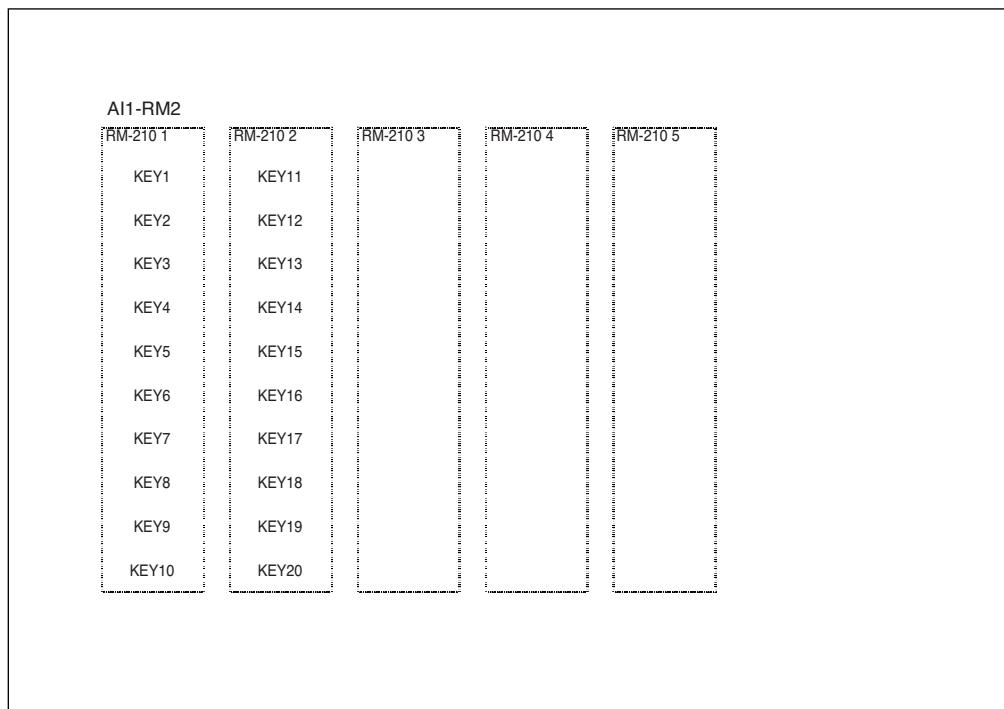
RM-210's key names are printed in the label boxes as many as the number of the set RM-210 units. (In the example above, 2 RM-210 units are set for the RM-200SA.)

[Print image of RM-200SF/210]

First page (RM-200SF)



Second page (RM-210)



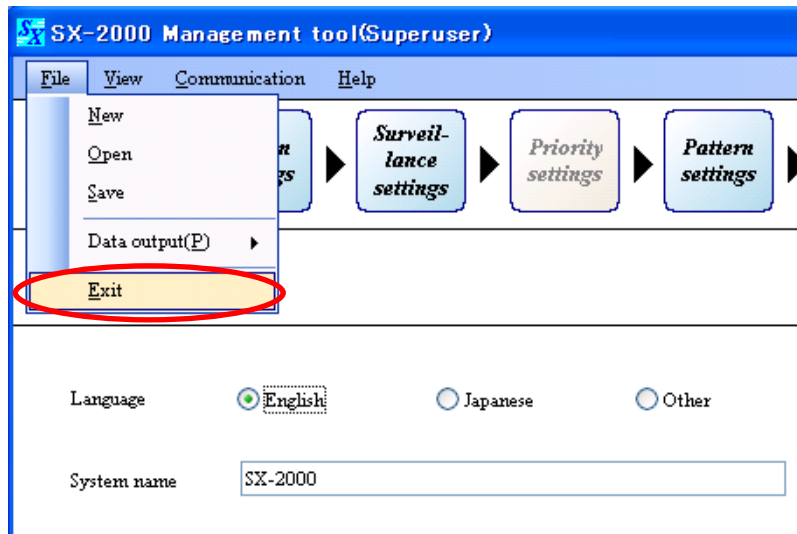
**Note**

RM-210's key names are printed in the label boxes as many as the number of the set RM-210 units. (In the example above, 2 RM-210 units are set for the RM-200SF.)

## 19. TERMINATING SETTING SOFTWARE

Exit the Setting Software after all necessary settings and file outputs have been completed.

[File → Exit] from the menu bar on the Setting Software.



### Note

If the setting file is not saved, the dialog below is displayed.

