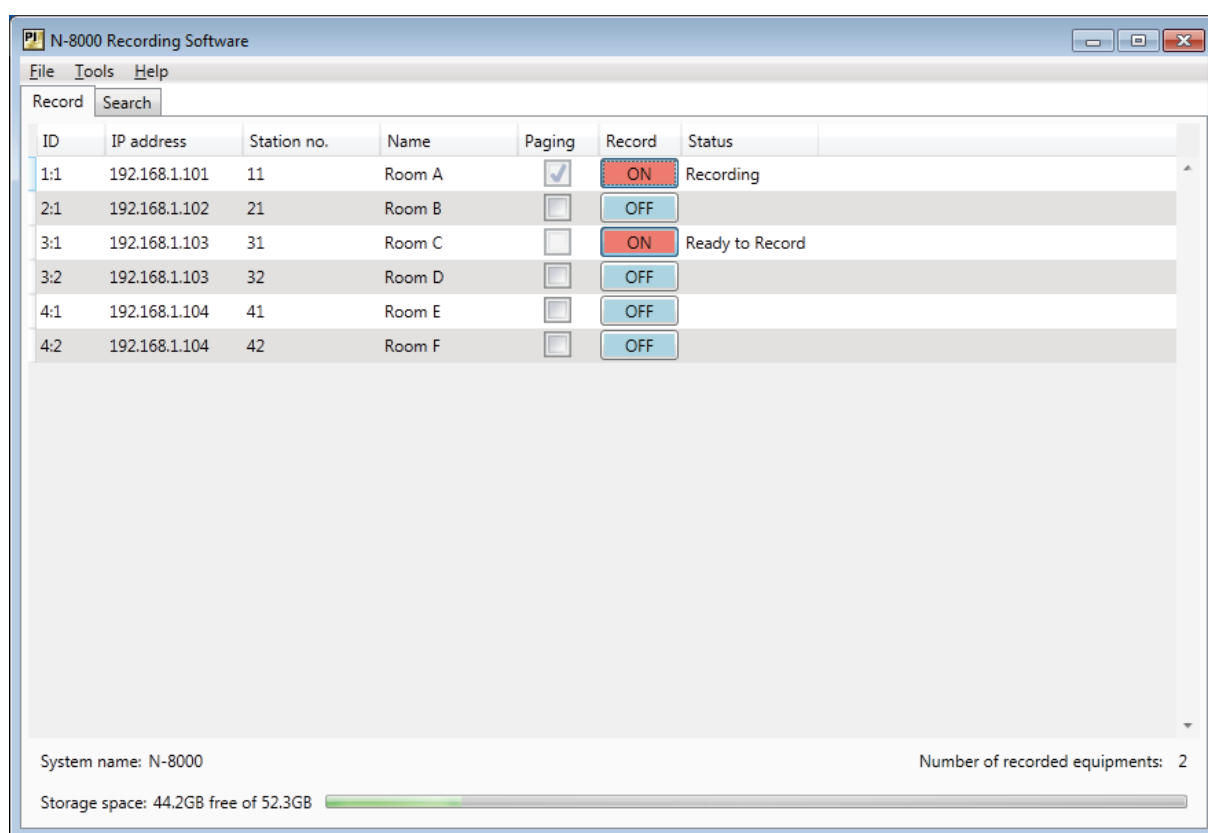




RECORDING SOFTWARE INSTRUCTIONS

PACKET INTERCOM SYSTEM

N-8000 SERIES



Thank you for purchasing TOA's Packet Intercom system.

Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

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1. SOFTWARE DESCRIPTIONS

The N-8000 Recording Software is a program used to record the audio signals of the N-8000 system components during conversation, paging, 3-party conference, and scan monitor into a PC, and to manage these recorded audio signals as audio files.

The N-8000 Recording Software features the following 2 functions.

- **Setting function for the recording target equipment**

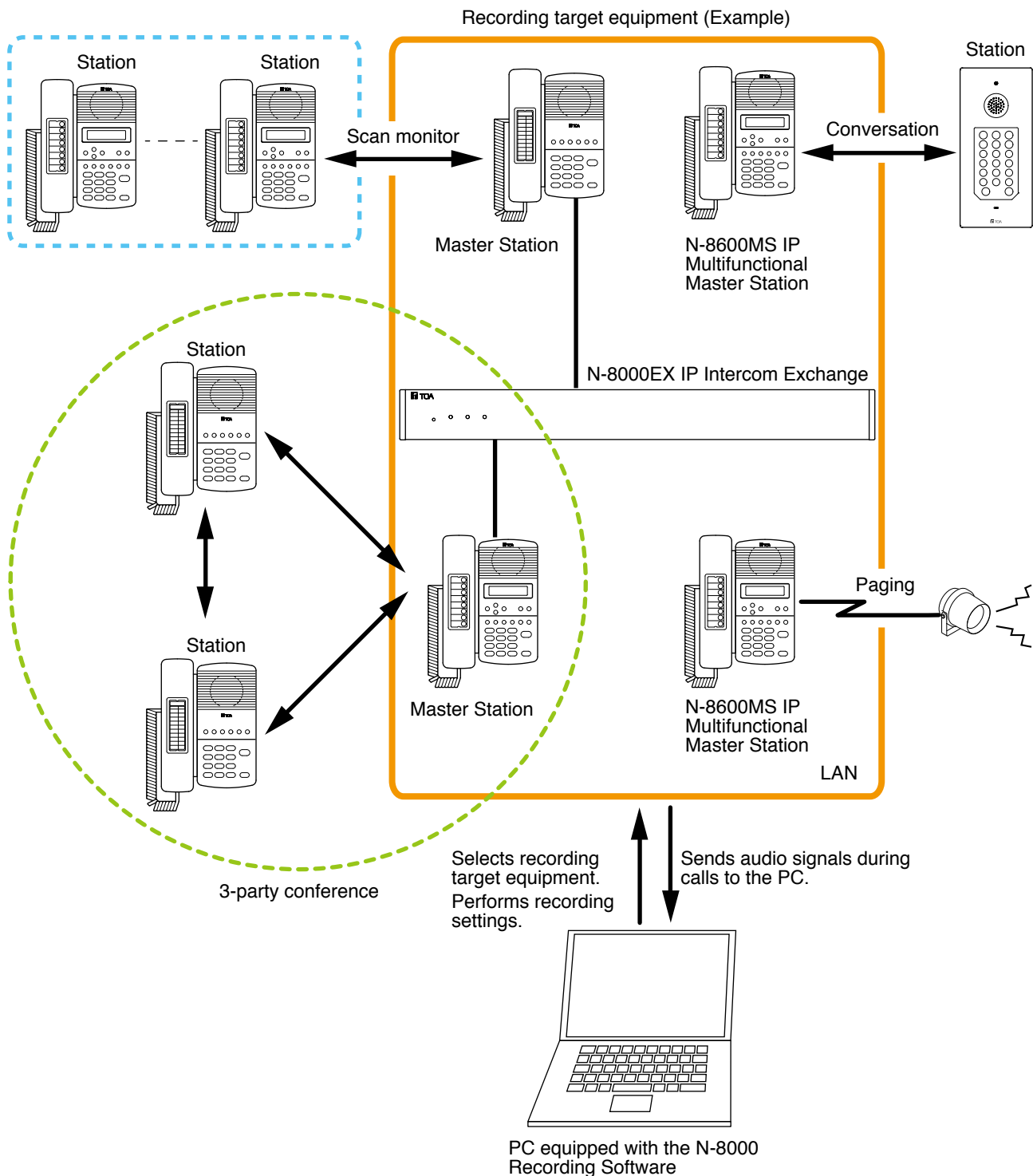
Performs selection and recording settings of the recording target equipment.

The recording target equipment is defined as N-8000 series components targeted by the N-8000 Recording Software as those to be recorded.

It sends the audio data during conversation, paging, 3-party conference, and scan monitor to the PC equipped with this software.

- **Audio file management**

Recorded audio files can be searched and exported to the designated folder.



2. PC REQUIREMENTS

Install this software on the PC meeting the requirements below.

[Essential requirements]

Hardware Requirements	
Display	1024 x 768 pixels or more
Software requirements	
OS	Windows 7 Professional SP1 (32/64 bit) Windows 8.1 Pro (32/64 bit) Windows 10 Home (32/64 bit) Windows 10 Pro (32/64 bit)
Essential component	Windows 7 : Microsoft .NET Framework 4 (If not installed, download it from the Microsoft Download Center via the Internet, then install it in your PC.) Windows 8.1 : No essential component is required. Windows 10 : No essential component is required.

[Recommended requirements]

Hardware Requirements	
CPU	Intel Core i5-2400 CPU @ 3.10 GHz or higher
Memory	Over 4 GB
Free Hard Disk Space	Over 100 GB (About 2.7 GB is used per sound source at 24-hour continuous recording)

- Intel Core is the trademark of Intel Corporation in the United States and other countries.
- Microsoft and Windows are the registered trademarks of Microsoft Corporation in the United States and other countries.

Notes

- Connect the recording target N-8000 system components and the PC equipped with the N-8000 Recording Software to the same LAN.
Besides, the recording function needs to be incorporated in the target components' firmware. (See Tip below.)
Download the latest version of firmware (with the recording function) from the TOA Product Data download site <http://www.toa-products.com/international/>.
- The N-8000 Recording Software may not be activated if the firewall of the PC running the N-8000 Recording Software is set.
In such cases, change the firewall setting to remove the block to the N-8000 Recording Software.

Tip

As of December 2017, recordable models and recording function built-in firmware versions are as shown below.

- Master stations to be connected to the N-8000EX IP Intercom Exchange (Ver. 3.20 or later)
- N-8600MS IP Multifunctional Master Station (Ver. 3.20 or later)
- N-8000AL Telephone Interface Unit (Ver. 4.10 or later)
- N-8000CO C/O Interface Unit (Ver. 4.10 or later)
- N-8640DS IP Door Station (Ver. 4.10 or later)
- N-8650DS IP Indoor Station (Ver. 4.10 or later)
- N-8640SB IP Door Station Board (Ver. 4.10 or later)
- N-8610RM IP Remote Microphone Station (Ver. 4.10 or later)

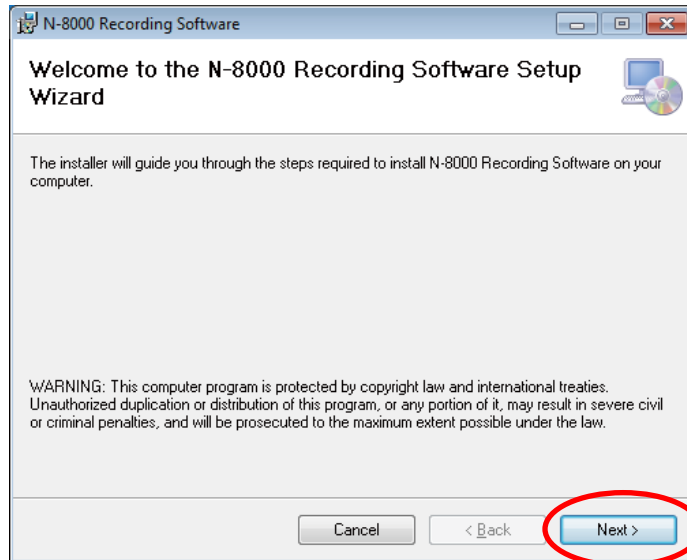
3. SOFTWARE SETUP

3.1. Installing the N-8000 Recording Software

Step 1. Download the "N-8000 Recording software" from the TOA Product Data download site (<http://www.toa-products.com/international/>).

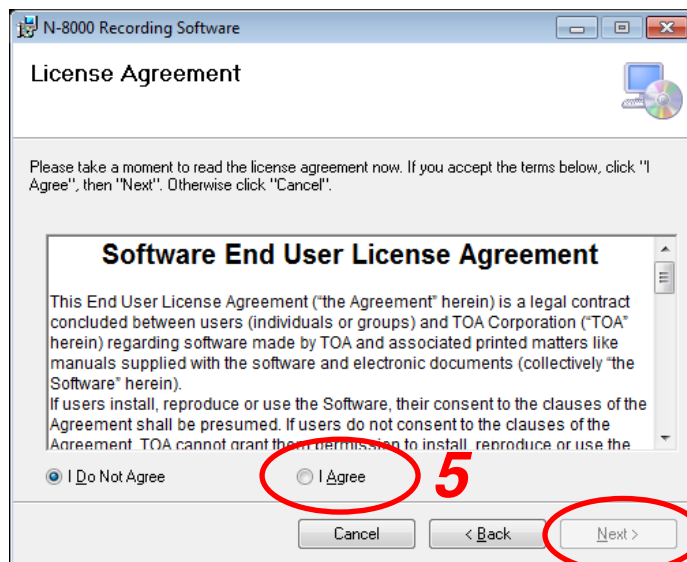
Step 2. Extract the downloaded N-8000 Recording software package.

Step 3. Double-click the "setup.exe" contained in the extracted folder.
An installer is activated.



Step 4. Click the [Next] button.

The License Agreement confirmation screen is displayed.

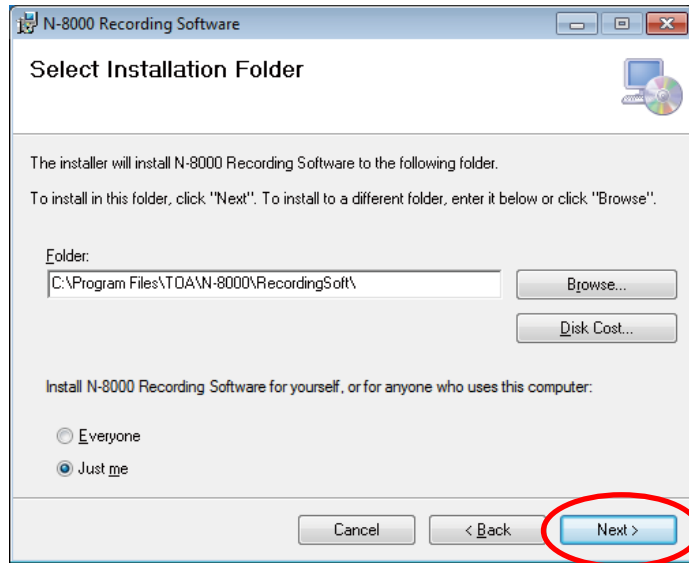


Step 5. Carefully read the contents of the License Agreement, and select "I Agree." Then, click the [Next] button.

The Select Installation Folder screen is displayed.

Note

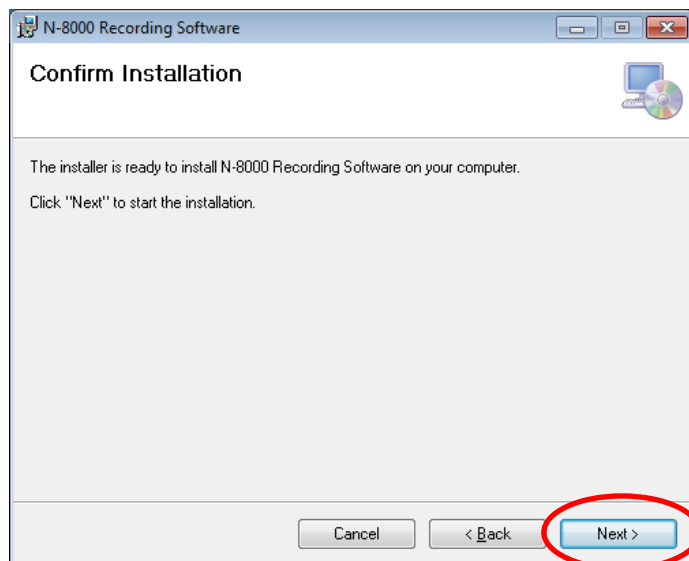
Selecting "I Do Not Agree," followed by the [Cancel] button will exit the software without installing it.



6

Step 6. Confirm the contents, then click the [Next] button.

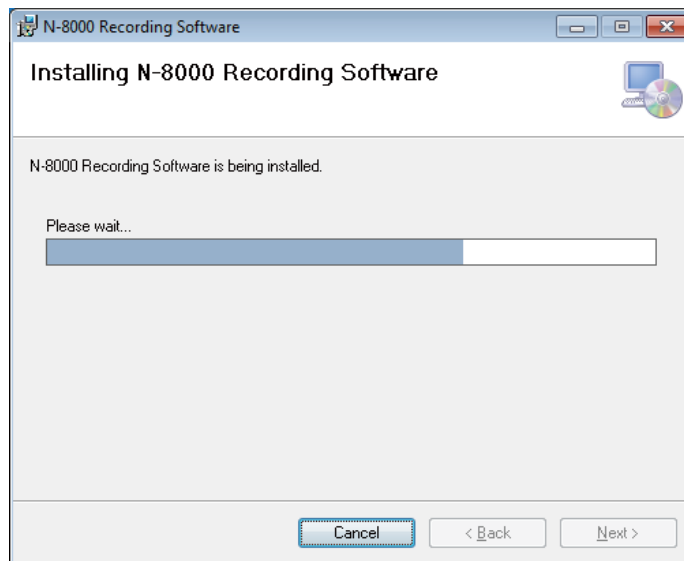
The Confirm Installation screen is displayed.



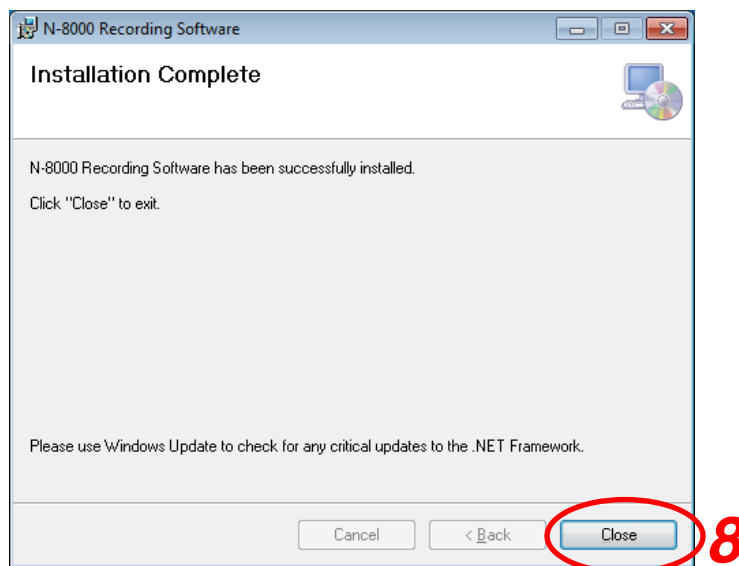
7

Step 7. Click the [Next] button.

After installation completion, the Installation Complete screen is displayed.



Step 8. Click the [Close] button.



3.2. Folder Configuration

The N-8000 Recording Software is installed in the default location as shown below.

32 bit version: C:\Program Files\TOA\N-8000\RecordingSoft\

64 bit version: C:\Program Files (x86)\TOA\N-8000\RecordingSoft\

An application settings file is created in the following folder (Setting data folder).

C:\ProgramData\TOA Applications\N-8000\RecordingSoft\

A recorded audio file is created in the following folder (Recording data folder) by default.

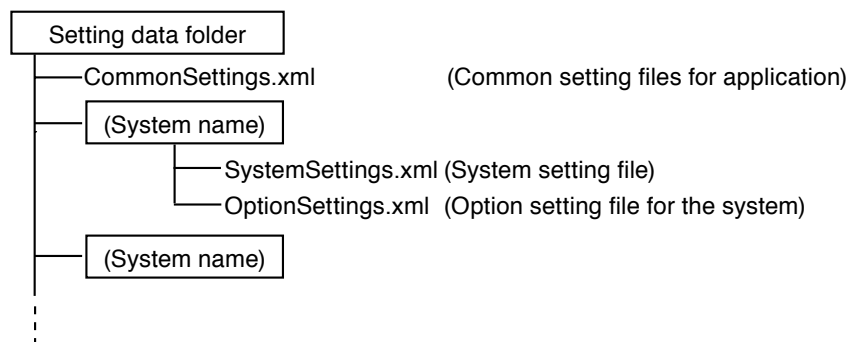
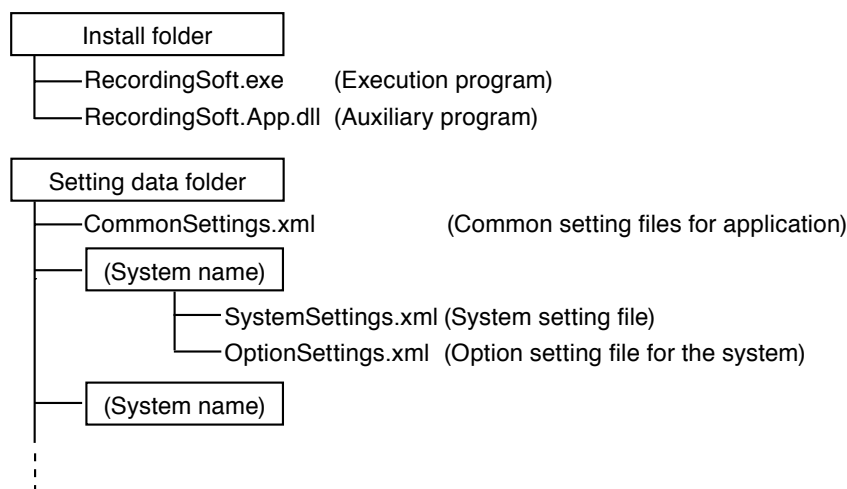
C:\ProgramData\TOA Applications\N-8000\RecordingSoft\

Note: Folder to save audio files in can be changed by the option setting. (See [p. 20](#).)

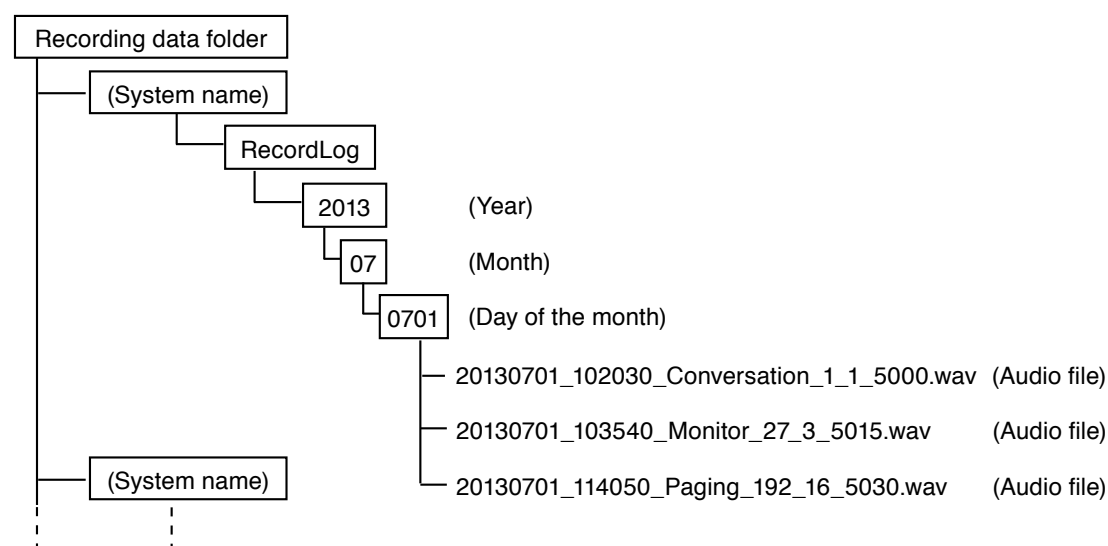
Note

The Setting data folder and Recording data folder are set as hidden folders in Windows default program. If wishing to confirm them, change the setting so as to display the hidden folders.

Shown below is the configuration of all the folders.



Note: The settings files above are automatically created while the N-8000 Recording Software is running.



Note: The Audio files above are created in real time while the recording is in progress. They are saved according to the naming rules below.

[Recording start date (8 digits)] _ [Recording start hours, minutes, and seconds (6 digits)] _ [Application] _ [Equipment number of the recording target equipment] _ [Line number of the recording target equipment] _ [Station number of the recording target equipment].wav

3.3. Version Update Information

- The latest versions of the "N-8000 Recording Software" and "N-8000 Recording Software Instruction Manual" are released at the TOA product data download site (<http://www.toa-products.com/international/>).
- The Software version number can be confirmed from the Help menu.
- The instruction manual version number can be confirmed by checking the preparation date shown in the lower right corner of the last page.
(Example) When created in June, 2013: 201306

3.4. Uninstalling the N-8000 Recording Software

Step 1. Click the Start button on the PC's desktop screen, then select "Control Panel."
The "Control Panel" window is displayed.

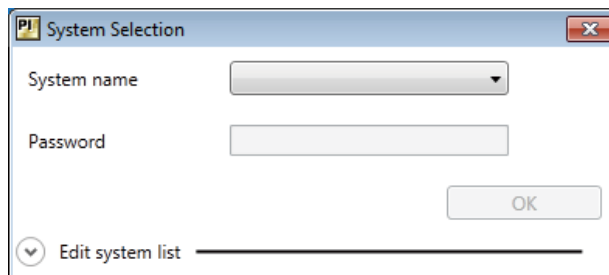
Step 2. Select "Programs and Features."
The currently installed programs are then displayed.

Step 3. Select "N-8000 Recording Software", then click "Uninstall."
The N-8000 Recording Software is uninstalled.

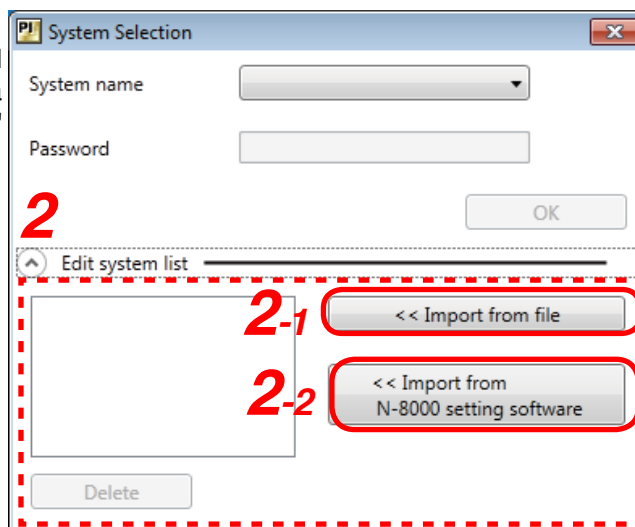
4. SELECTING THE SYSTEM

4.1. Starting the Recording Software, then Selecting the System

Step 1. Double-click the "N-8000 Recording Software" shortcut on the desktop screen or select "TOA → N-8000 → N-8000 Recording Software" from the Start menu.
The System Selection screen is displayed.



Step 2. Import the system into the system list.
Clicking the "Show/Hide" toggle button located beside the "Edit System List" switches the area enclosed by the dotted line between "Show" and "Hide."



- 2-1.** When importing from Explorer
Click the [Import from file] button.
The Explorer screen is displayed.
Select the "pi8" file to import the system into the system list.

Notes

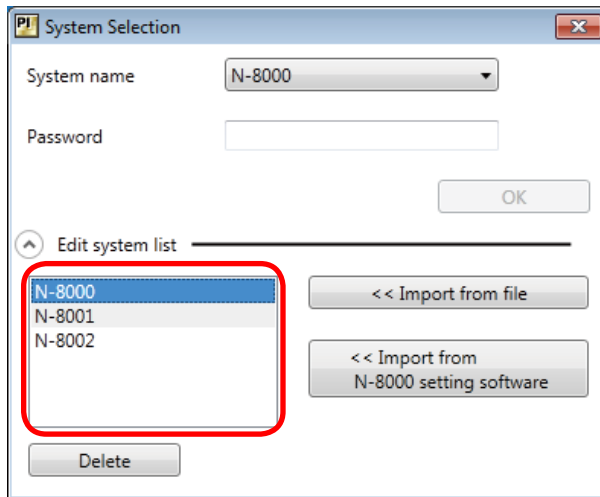
- "pi8" is a system settings file created using the N-8000 Setting Software. For details, see the separate N-8000 Series instruction manual, Chapter 5.
- Overwrite confirmation dialog is displayed if you try to import the system with the name existing in the System list.

- 2-2.** When importing from the N-8000 Setting Software
Click the [Import from N-8000 setting software] button.
All the systems stored in the N-8000 Setting Software are imported into the System list.

Notes

- Overwrite confirmation dialog is displayed if you try to import the system with the name existing in the System list.
- If the system setting has not been saved on the N-8000 Setting Software, this button cannot be clicked.

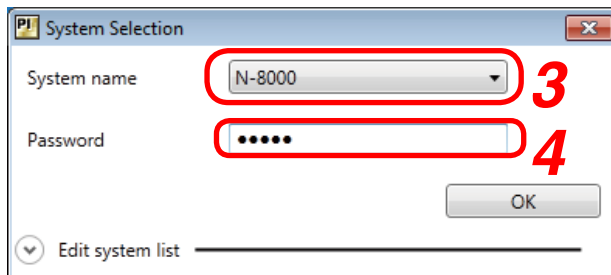
Note: The systems imported in **Step 2-1** or **2-2** are displayed in the System list.



Step 3. Select the system.

Select the system to be recorded from the pull-down menu.

Note: Nothing is displayed if no system has been imported into the System list.



Step 4. Enter the password.

Enter the password, then click the [OK] button.

The Recording Software screen (p. 13) is displayed.

Notes

- If the input password is wrong, the [OK] button cannot be clicked.
- The password is the same as the system password set using the N-8000 Setting Software.

4.2. Deleting the System

The imported system can be deleted on the System Selection screen to be displayed when the N-8000 Recording Software is started.

Note

To display the System Selection screen after the N-8000 Recording Software screen has been displayed, restart the N-8000 Recording Software.

Step 1. Select the system to be deleted from the System list.

The systems imported into the N-8000 Recording Software are listed.

Select the system from the list.

Notes

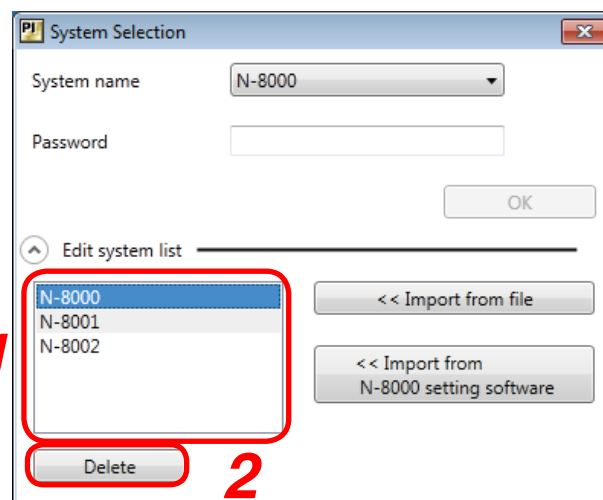
- Nothing is displayed if no system has been imported into the System list.
- If no system has been selected from the list, the [Delete] button cannot be clicked.

Step 2. Click the [Delete] button.

The Setting file of the selected system is deleted.

Note

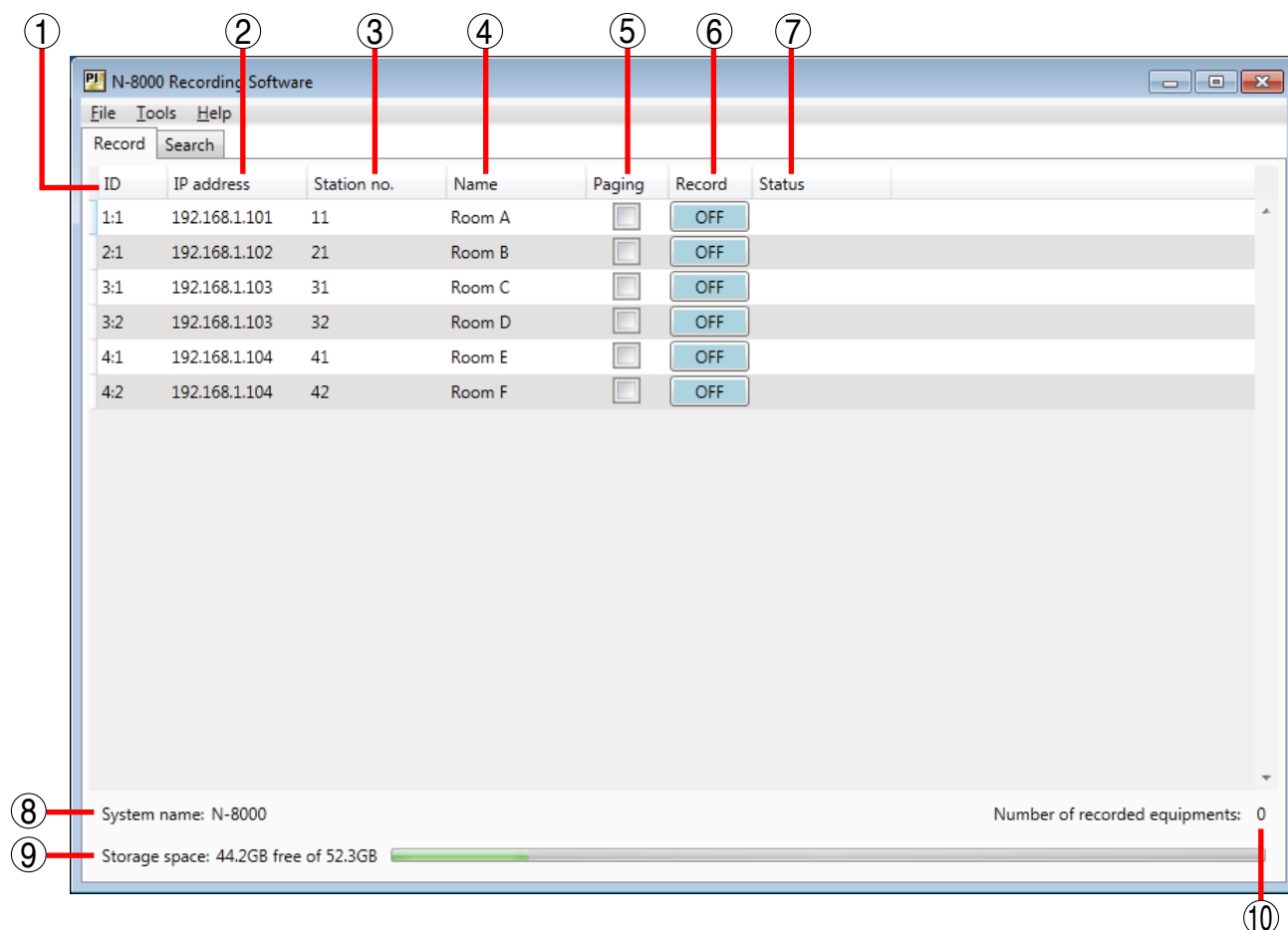
The Audio file recorded for the selected system will not be deleted even if the system has been deleted.



5. PERFORMING RECORDING SETTINGS

5.1. Recording Tab Screen

If the proper password is entered after selecting the System, the N-8000 Recording Software screen will be displayed. Selecting the [Record] tab causes the screen to change to the one listing all the recordable equipment registered in the System.



1. ID

Indicates the [Equipment number : Line number] of the equipment.

2. IP address

Indicates the equipment's IP address.

3. Station no.

Indicates the equipment's station number.
Indicates the access number in the case of the N-8000CO.

4. Name

Indicates the equipment's station name.
Indicates the outside line name in the case of the N-8000CO.

5. Paging

Sets paging recording ON or OFF when making recording.

Note: All equipment's recording modes are set to "OFF" (unchecked) by default.

6. Record

Sets recording ON or OFF of the equipment.

Note: All equipment's recording modes are set to "OFF" by default.

7. Status

Indicates the connection status with the equipment and the writing status of the Audio files during recording.

Note: For the display contents, see p. 21, "Status list on the recording settings screen."

8. System name

Indicates the currently opened System name.

9. Storage space

Indicates free storage space and the maximum storage space of the Audio file destination folder.

Note: If the free storage space is less than 200 MB, recording will not be performed.

10. Number of recorded equipments

Indicates the number of equipment during recording.

Notes

- Only the equipment within the system selected on the System Selection screen can be recorded using the N-8000 Recording Software.
- Only in the case of unicast paging, when the number of paging destinations reaches the upper limit (maximum 16 for the N-8000EX/8600MS/8610RM and maximum 8 for the N-8000AL/8000CO), no paging transmission is recorded even if the paging recording ("Record" column) is set to ON.

5.2. Performing Recording Settings for Each Equipment

Recording can be performed when the recording setting is set to ON while the N-8000 Recording Software is running.

Note

Do not exit the N-8000 Recording Software if you wish to continue recording.

Step 1. Perform paging recording ON/OFF setting for each equipment.

Place a check mark when adding the paging call to the recording contents.

Notes

- Paging recording ON/OFF setting cannot be changed when the Record has been set to ON.
- Paging recording ON/OFF setting also applies to the broadcasts to the SX-2000 system.

Step 2. Perform recording ON/OFF setting for each equipment.

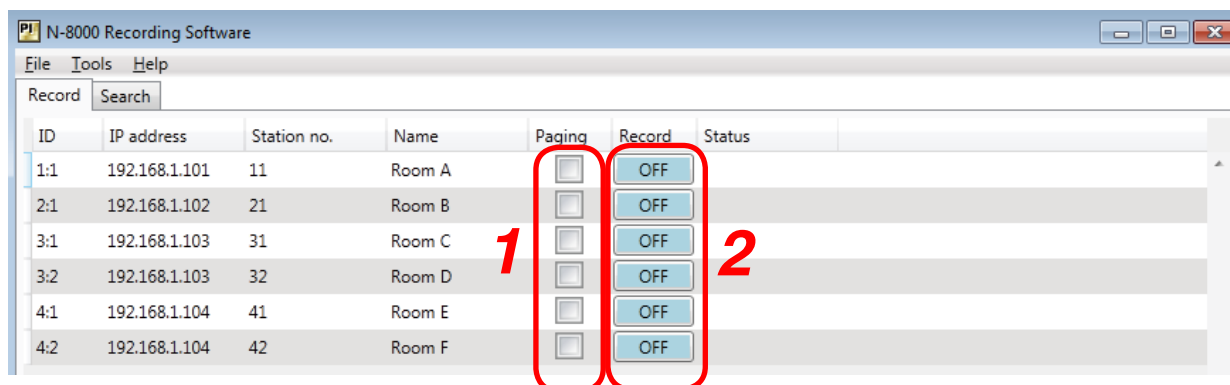
Clicking the [Record] button for the equipment to be recorded places the equipment in recording standby mode, and the audio signals start being recorded when the conversation, paging, 3-party conference, or scan monitor begins.

Clicking this button again makes the recording setting OFF.

During recording ON, the connection status with the equipment and writing status of the Audio file can be checked in the Status column.

Note

For the N-8000EX, up to 2 stations connected to the same exchange can be set to recording ON mode.



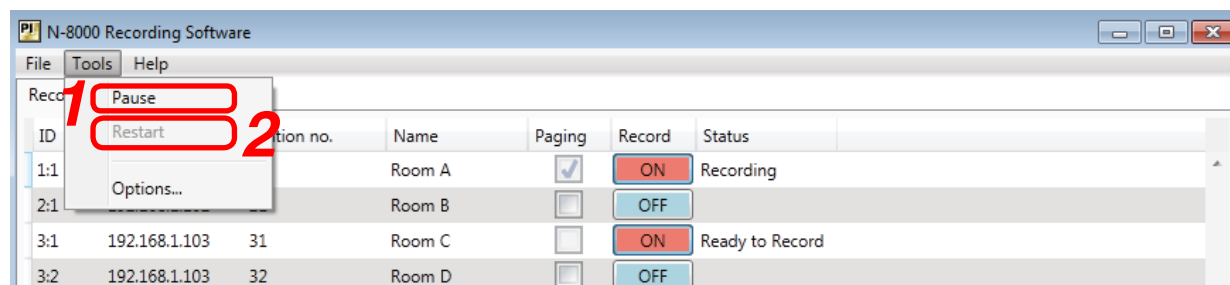
5.3. Pausing/Restarting Recording

Step 1. Select "Tools → Pause" from the menu.

All the equipment in recording ON mode is disconnected, and its audio signal recording is suspended.

Step 2. Select "Tools → Restart" from the menu.

All the equipment in recording ON mode is reconnected, and its audio signal recording is resumed.



Note

While the recording has been paused, recording ON/OFF setting for that equipment cannot be changed. Releasing the pause enables the recording ON/OFF setting change.

5.4. Saving/Reading the Recording Settings

Step 1. Select "File → Save" from the menu.

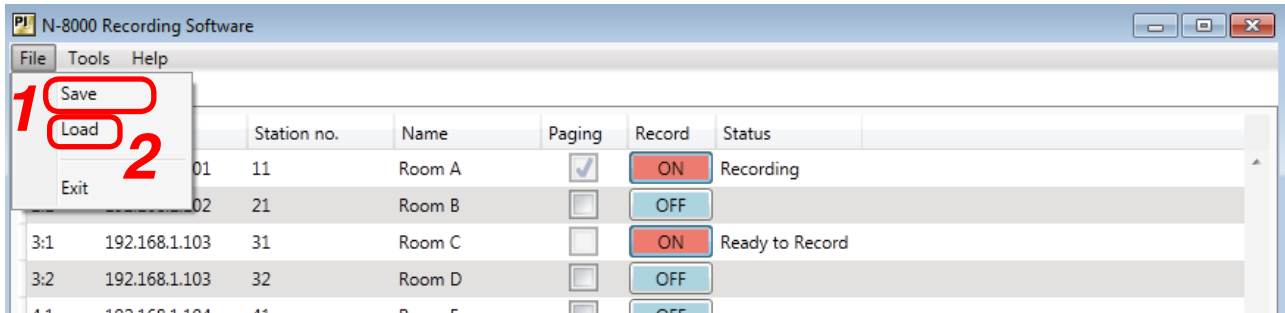
The current recording settings (Recording ON/OFF state and Paging recording ON/OFF state) are saved to the system setting file.

The saved recording state can be recalled the next time the software is started.

Note: Recording pause state cannot be saved.

Step 2. Select "File → Load" from the menu.

The last saved recording settings are recalled.



6. PLAYBACK/EXPORT AND DESTINATION CHANGE OF AUDIO FILES

6.1. Searching Audio Files

Select the [Search] tab on the N-8000 Recording Software screen to display the search screen for the saved audio files.

The screenshot shows the 'N-8000 Recording Software' window with the 'Search' tab selected. The interface includes a menu bar (File, Tools, Help) and two sub-tabs (Record, Search). The main area is divided into several sections:

- Search conditions:** A section enclosed in a red dashed line, containing:
 - Start time range:** A section enclosed in a red dashed line, containing 'From' and 'To' fields for Year, Month, Day, Hour, and Minute.
 - Application:** A section enclosed in a red dashed line, containing checkboxes for 'Conversation', 'Scan monitor', and 'Paging'.
- No. / Name:** A section containing three text input fields: 'Station no.', 'Station name', and 'Paging no.'.
- Logic:** Radio buttons for 'AND' (selected) and 'OR'.
- Search:** A button located at the bottom right of the search area.

Red numbers 1 through 7 are placed around the interface to highlight specific elements: 1 points to the 'Search conditions' header, 2 points to the 'Application' section, 3 points to the 'Station no.' field, 4 points to the 'Station name' field, 5 points to the 'Paging no.' field, 6 points to the 'AND/OR' logic buttons, and 7 points to the 'Search' button.

Below the search area, there is a 'Results' section with a table header and buttons for 'Check all', 'Uncheck all', and 'Export files..'. The table header includes columns for Start time, Duration, Application, Calling no., Calling name, Called no., Called name, Paging no., File, and Export.

Note

Only the audio files within the system selected on the System Selection screen can be searched using the N-8000 Recording Software.

Step 1. Designate the Start time range.

Clicking the Show/Hide toggle button located beside the "Search conditions" indication switches the area enclosed in the dotted line between "Show" and "Hide."

From: Enter the earliest recording start time.

Enter the year in a 4-digit format.

Select "Month," "Day," "Hour," and "Minute" from the pull-down menu.

Entry can be accepted in the order of Year/Month/Day/Hour/Minute.

Note: If no earliest time is designated, then the following values are set.

Year: 1, Month: 1, Day: 1, Hour: 0, Minute: 0

To: Select the latest recording start time from the pull-down menu in the same manner as the "From" setting.

Note: If no latest time is designated, then the following values are set.

Year: 9999, Month: 12, Day: 31, Hour: 23, Minute: 59

Step 2. Designate the Application.

Place a check mark to "Application" to be designated as the Search target.

There are following 3 applications.

Conversation: An audio file that the conversation or 3-party conference has been recorded

Scan monitor: An audio file that the scan monitor has been recorded

Paging: An audio file that the paging has been recorded

Step 3. Designate the station number.

Enter the station number to be searched.

In the case of the N-8000CO, enter [Equipment number : Line number].

To enter 2 or more station numbers, enter the numbers by separating them with a space.

Step 4. Designate the station name.

Enter the station name to be searched.

In the case of the N-8000CO, enter the outside line name.

To enter 2 or more station names, enter the names by separating them with a space.

Step 5. Designate the paging number.

Enter the paging number or the system ID of the SX-2000 system to be searched.

To enter 2 or more paging numbers, enter the numbers by separating them with a space.

Step 6. Designate the AND/OR for search condition.

AND search: Searches the audio files matching the all conditions entered in the Station number field, Station name field, and Paging number field.

OR search: Searches the audio files matching any one of the items entered in the Station number field, Station name field, and Paging number field.

Step 7. Click the [Search] button to start audio file search.

The audio files matched with the entered search conditions are listed in the lower part of the screen.

During search, the [Search] button is turned into [Stop searching] button.

To stop the search, click the [Stop searching] button.

Note

No audio files during recording or playback can be searched.

6.2. Playing Back or Exporting the Audio File

When a search is completed, the audio files matched with the entered search conditions are listed in the lower part of the screen.

By selecting the audio file from the search result, it can be played back or exported to a different folder.

[Search result display screen]

Search conditions

Start time range

From To

Year Month Day Hour Minute Year Month Day Hour Minute

No. / Name

Station no. 21

Station name

Paging no.

AND OR

Application

☒ Conversation ☒ Scan monitor ☒ Paging

Search

Results : 5

Check all Uncheck all Export files..

Start time	Duration	Application	Calling no.	Calling name	Called no.	Called name	Paging no.	File	Export
2013-06-07T10:36:40	00:00:06	Conversation	21	Room B	11	Room A		open	<input checked="" type="checkbox"/>
2013-06-07T10:48:37	00:01:18	Conversation	11	Room A	21	Room B		open	<input type="checkbox"/>
2013-06-07T10:51:55	00:01:21	Conversation	21	Room B	31,11	Room C,Room A		open	<input checked="" type="checkbox"/>
2013-06-07T10:51:55	00:01:21	Conversation	21	Room B	31,11	Room C,Room A		open	<input type="checkbox"/>
2013-06-07T10:59:34	00:00:03	Scan monitor	11	Room A	21	Room B		open	<input type="checkbox"/>

Following are descriptions of the audio file search result and operations in the search result section.

1. Results

Displays the number of audio files matched with the entered search conditions.

2. Audio file list

Lists the audio files matched with the entered search conditions. Items to be shown are as follows.

Start time: Displays the recording start time.

Duration: Indicates the time that has elapsed during recording.

Note: The actual time length of audio file may differ from the displayed time length depending on the network condition.

Application: Displays the type of the recorded call.

Calling no.: Displays the calling station number.

Displays [Equipment number : Line number] if no station number is provided.

Calling name: Displays the calling station name.

Displays the outside line name in the case of the N-8000CO.

Called no.: Displays the called station number.*

Displays [Equipment number : Line number] if no station number is provided.

Called name: Displays the called station name.*

Displays the outside line name in the case of the N-8000CO.

Paging no.: Displays the paging number for the audio file to which the paging was recorded.

Displays the system ID of the SX-2000 system when the audio file was recorded for the broadcasts to the SX-2000 system.

File: Displays the link destination of the audio file. Clicking "open" plays back the audio file.

Export: Mark the checkbox when wishing to export the audio file.

* "Called no." and "Called name" are not displayed when paging transmission was recorded.

3. Export files

Exports the audio files for which the "Export" field checkboxes have been marked.
Clicking the [Export files] button displays the Explorer screen.
Select the export destination folder for the audio file.

4. Collective setting of the export ON/OFF

To check all the "Export" fields, click the [Check all] button.
To uncheck all the "Export" fields, click the [Uncheck all] button.

6.2.1. Playback method

Click "open" in the "File" field of the audio file to be played back.
The audio file is played back.

Results : 5

Check all

Uncheck all

Export files..

Start time	Duration	Application	Calling no.	Calling name	Called no.	Called name	Paging no.	File	Export
2013-06-07T10:36:40	00:00:06	Conversation	21	Room B	11	Room A		open	<input type="checkbox"/>
2013-06-07T10:48:37	00:01:18	Conversation	11	Room A	21	Room B		open	<input type="checkbox"/>
2013-06-07T10:51:55	00:01:21	Conversation	21	Room B	31,11	Room C,Room A		open	<input type="checkbox"/>
2013-06-07T10:51:55	00:01:21	Conversation	21	Room B	31,11	Room C,Room A		open	<input type="checkbox"/>
2013-06-07T10:59:34	00:00:03	Scan monitor	11	Room A	21	Room B		open	<input type="checkbox"/>

6.2.2. Export method

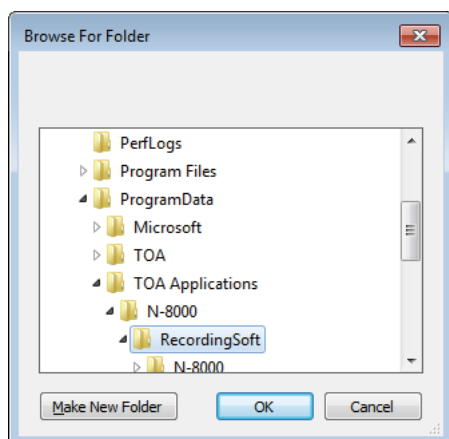
Step 1. Click the checkbox in the "Export" field of the audio file to be exported.
The audio file is selected.

Tip

To select all the audio files, click the [Check all] button.
To uncheck all the checkboxes, click the [Uncheck all] button.

Results : 5								Check all	Uncheck all	Export files..
2013-06-07T10:36:40 00:00:06 Conversation 21 Room B 11 Room A										
2013-06-07T10:48:37 00:01:18 Conversation 11 Room A 21 Room B										
2013-06-07T10:51:55 00:01:21 Conversation 21 Room B 31,11 Room C,Room A										
2013-06-07T10:51:55 00:01:21 Conversation 21 Room B 31,11 Room C,Room A										
2013-06-07T10:59:34 00:00:03 Scan monitor 11 Room A 21 Room B										

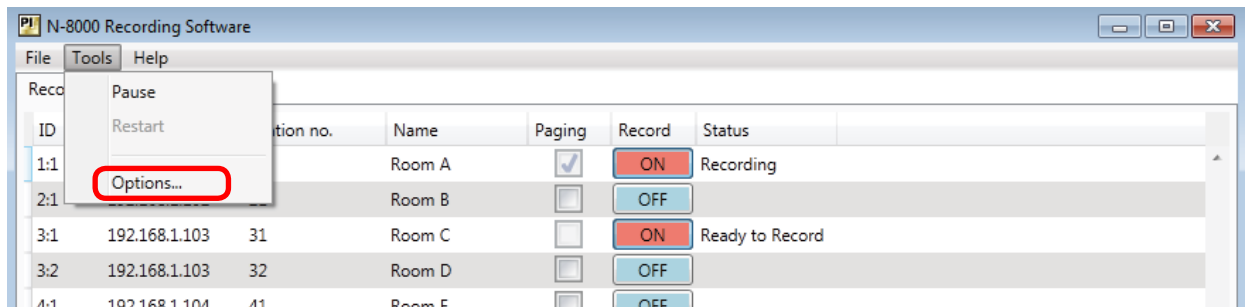
Step 2. Click the [Export files] button.
The "Browse For Folder" screen is displayed.



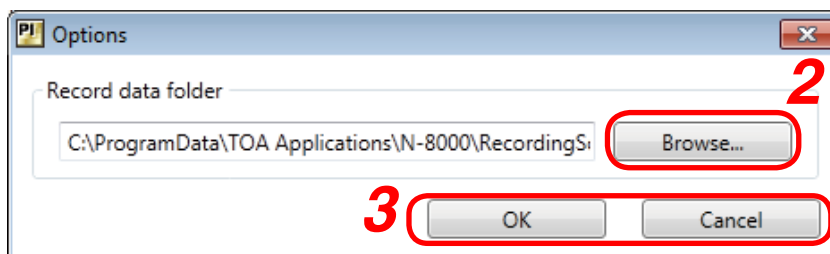
Step 3. Select the destination folder of the audio file, then click the [OK] button.
The display reverts to the Search result display screen.
Note: If you do not export the audio file, click the [Cancel] button.

6.3. Changing the Destination Folder of the Audio File

Step 1. Select "Tools → Options" from the menu bar.
The Option setting screen is displayed.



Step 2. Click the [Browse] button, then select the destination folder of the audio file.
Clicking the button displays the Explorer screen.
Select the folder to save the audio file in (Recording data folder).
Note: The audio file destination folder cannot be changed during recording.



Step 3. Click the [OK] button.
Option setting is saved and the display reverts to the N-8000 Recording Software screen.
If you do not change the settings, click the [Cancel] button.

7. STATUS LIST ON THE RECORDING SETTINGS SCREEN

	Display contents	Descriptions
Recording in normal status	Recording	Refers to recording in progress. The recording target equipment stays in any one of the following statuses: Conversation, paging, 3-party conference, or scan monitor.
	Ready to Record	Refers to the recording standby status. The recording target equipment is not placed in any one of the following statuses: Conversation, paging, 3-party conference, or scan monitor.
When recording is paused	Recording Paused	Refers to the status that the recording pause function is selected. To restart recording, release the recording pause status from the menu bar.
Recording error	Not Found	Refers to the inaccessible status to the recording target equipment. Confirm that there is no fault with the network connection between the N-8000 Recording Software and the recording target equipment, or the settings.
	Request Timeout	Refers to the no response status to the message sent to the recording target equipment. Check that the connection destination is the recording target equipment and also the recording target equipment's firmware is the latest one.
	Request Denied	The system is placed in one of the following statuses. <ul style="list-style-type: none"> • The recording target equipment has already been connected to other PC, so no more connection can be established. To record, release the connection between the recording target equipment and other PC. • The N-8000 Recording Software's system name differs from the recording target equipment's one. Match the system names of both the N-8000 Recording Software and recording target equipment.
	Recording Failure	Refers to the status that audio file creation has failed. Confirm that there is no problem in storage operation or in the N-8000 Recording Software's write permission for the recording data folder.
	Record to N-8000AF	Refers to the status that recording cannot be performed as the recording conflicts with the one by the N-8000AF. To give priority to the recording by the N-8000 Recording Software, stop recording by the N-8000AF.
	Full Request	Refers to the status that recording cannot be performed as the number of requests has reached the upper limit at the audio destination of the recording target equipment. Check if recording has been performed by other PC using the N-8000 Recording Software.
	Busy	Refers to the status that recording target equipment is not in standby mode, not ready for recording. Keeping the equipment in standby mode for 30 seconds automatically places the equipment in recordable mode. Note: When the station's BGM reception is set to ON, "Busy" is displayed and recording cannot be performed even while in standby mode.
	Station Unconnected	Refers to the status that the station is not connected to the line of the recording target N-8000EX. Confirm that there is no fault with the N-8000EX's terminal connection.
	Not Recordable	Refers to the status that a station other than the master station is connected to the line of the recording target N-8000EX. Confirm that there is no fault with the N-8000EX's terminal connection.
	Command Error	Refers to the status that the communication protocols of both the N-8000 Recording Software and recording target equipment are mismatched. Check that versions of the recording target equipment's firmware and N-8000 Recording Software are the latest ones.

Traceability Information for Europe

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