



INSTALLATION GUIDE

DISPATCHER SOFTWARE

RC-FS20

INTRODUCTION

1 SOFTWARE INSTALLATION

2 BEFORE USING THE RC-FS20

3 DISPATCHING OPERATION

INTRODUCTION

Thank you for choosing this Icom product.

The RC-FS20 DISPATCHER SOFTWARE was designed and built with Icom's IP network technology.

We hope you agree with Icom's philosophy of "technology first." Many hours of research and development went into the design of your RC-FS20.

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- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom product with any equipment that is not manufactured or approved by Icom.

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Features

- The RC-FS20 DISPATCHER SOFTWARE can dispatch the radios in multiple radio systems onto a single screen.
 - A total of up to 32 Icom transceiver system sites including a total of 8 IDAS Conventional, Trunking, dPMR Mode 2* , RoIP Gateway*, and up to 32 WLAN transceiver Sites.
 - *Support for the dPMR Mode 2 and RoIP Gateway sites is coming soon.
 - A total of up to 8 Dispatch screens can be configured on the RC-FS20.
 - In the Conventional mode, the AES or DES Encryption communication is supported. (Requires an optional license key contract.)
-
- The screen captures in this manual are examples of using Windows 11.
 - In this manual, the RC-FS20 is described as “Dispatcher software.”
 - This document is described based on the RC-FS20 version 1.06.

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System requirements

PC

Operating system	Windows 11 ① Except for Windows on ARM. Windows Server 2022 Windows Server 2025
CPU	Intel or AMD 3.0 GHz or faster processor (8 or more cores)
Memory	16 GB or more
Storage	256 GB or more free disk space
Audio	DirectSound compatible sound card that covers the frequency response range of up to 20 kHz, with a sampling rate of 48 kHz
Display Resolution	1920 × 1080 pixels or higher
Network	1 Gbps or faster wired connection
Other hardware	• USB 2.0 ports for CT-24 connection • Speaker or headset • Microphone

① The instructions are based on using Windows 11.

Optional equipments

- SM-26 DESKTOP MICROPHONE
- CT-23 PTT MICROPHONE ADAPTER
- BC-147 or BC-123S POWER ADAPTER for the CT-23

To communicate with Conventional or Trunking site

- CT-24 DIGITAL VOICE CONVERTER

① A CT-24 is required for each site.

For example, If you want to configure a WLAN mode site, a site in Conventional mode, and a site in Trunking mode, you need to connect 2 CT-24s to your PC.

NOTE: When using the CT-24, install the USB driver to your PC before connecting the CT-24. Ask your dealer for details on the driver software and its installation instructions.

About the optional license keys

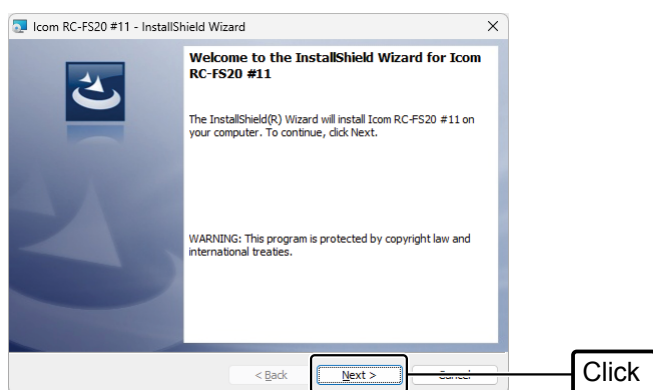
To use the RC-FS20, you need to import one or more subscribed license key(s) to activate the required functions, according to your radio system configuration. Ask your dealer for more details on the license keys.

1 SOFTWARE INSTALLATION

Installing the RC-FS20 on your PC

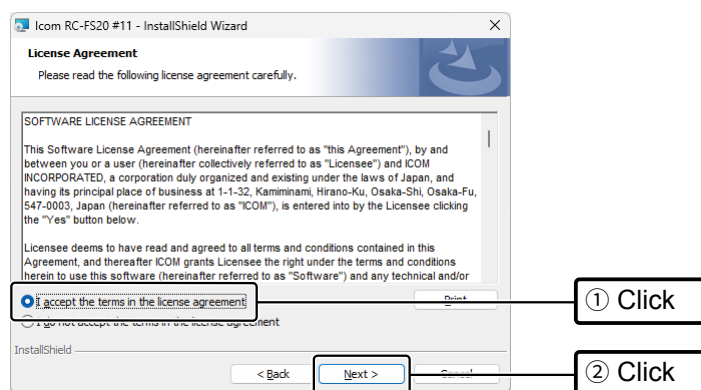
Make sure Windows has finished starting up, and sign in as the administrator.

- 1 Confirm no other applications are running.
- 2 Double-click “setup.exe.”
① If “User Account Control” is displayed, click <Yes> to continue.
- 3 “Welcome to the InstallShield Wizard for Icom RC-FS20 #11” is displayed. Click <Next>.



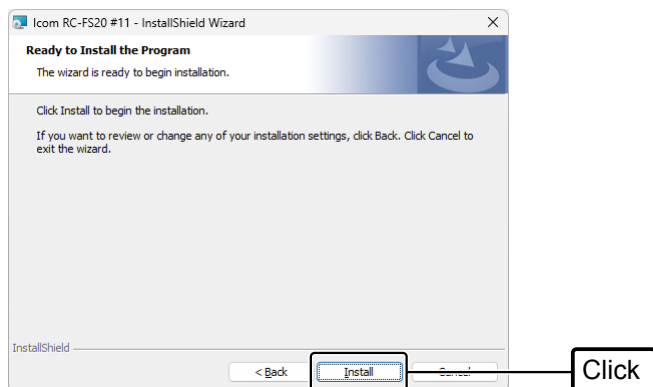
- “Software License Agreement” is displayed.

- 4 Read carefully, and if you agree to the terms and conditions, click “I accept the terms in the license agreement,” and then click <Next>.



- “Ready to Install the Program” is displayed.

- 5 Click <Install> to install the software.

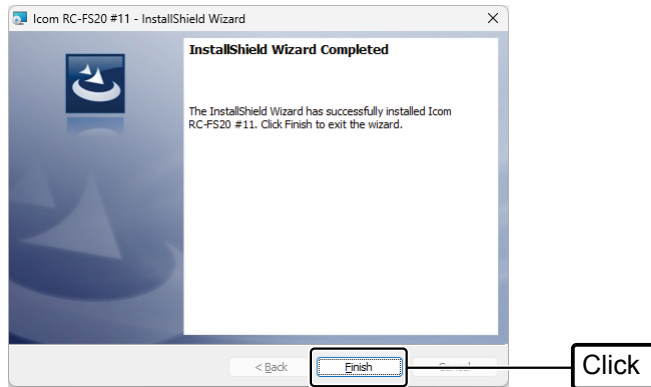


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1 SOFTWARE INSTALLATION

Installing the RC-FS20 on your PC

- 6 After the installation completes, “InstallShield Wizard Completed” is displayed. Click <Finish>.



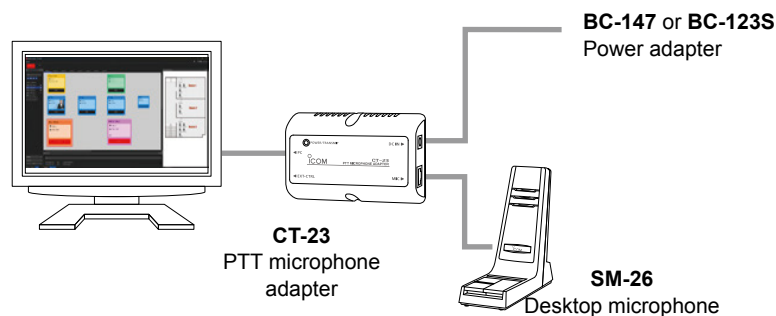
- The “Icom RC-FS20 #11” shortcut icon is created on the desktop.

NOTE: You can uninstall the Dispatcher software using the “Installed apps” in the “Apps” menu. Go to START (Windows logo) > Settings > Apps > Installed apps.

Connecting the optional devices to your PC

■ Connecting the Desktop microphone

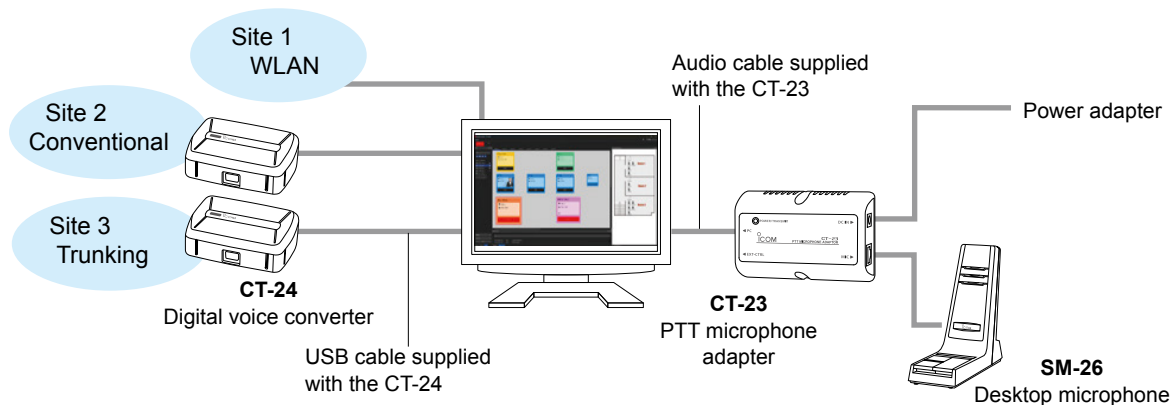
Connect the SM-26 DESKTOP MICROPHONE through a CT-23 PTT MICROPHONE ADAPTER to your PC, if necessary.



■ Connecting the digital voice converters

To communicate with the Conventional or Trunking mode, you must connect a CT-24 DIGITAL VOICE CONVERTER for each site you want to connect to.

For example, as shown below, you need 2 CT-24s for your PC to connect to the Site 2 (in the Conventional mode) and Site 3 (in the Trunking mode).



NOTE: When using the CT-24, install the USB driver to your PC before connecting the CT-24. Ask your dealer for details on the driver software and its installation instructions.

Importing the license keys

To use the RC-FS20, you need to purchase and import one or more license keys to activate the required functions, according to your radio system configuration.

To import the license keys to the RC-FS20, follow the steps below.

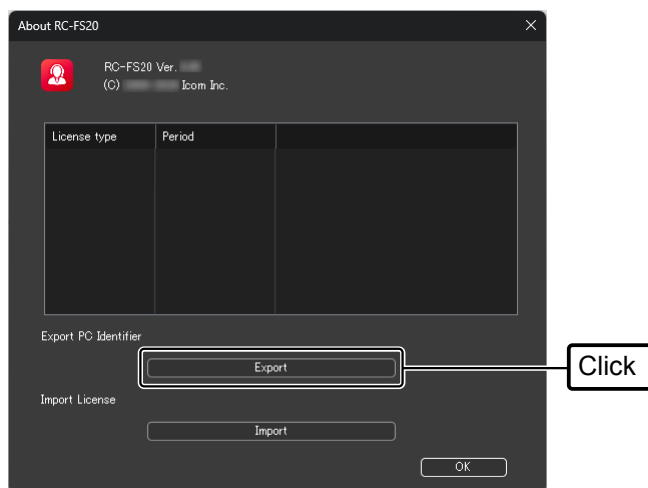
1. Export the PC Identifier to a .dat file on your RC-FS20, and send the file to your distributor.
2. Import the provided license key(s) as a .zip file onto your RC-FS20.

1. Exporting the PC Identifier to a file:

- 1 Double click the "Icom RC-FS20 #11" icon on the desktop to open the RC-FS20.

- "About RC-FS20" window is displayed.

- 2 Click <Export>.



- 3 Select a folder and click <Save>.

- The PC Identifier file is exported as a .dat file. (Example: rcfs20_pc_YYYYMMDDhhmm.dat)

- 4 Send the file by following your distributor's instructions.

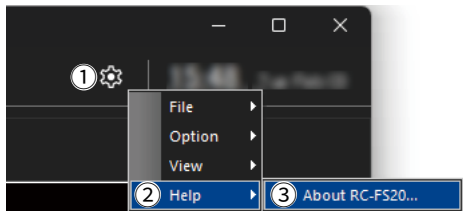
1 SOFTWARE INSTALLATION

Importing the license keys

2. Importing the provided License key(s) onto your RC-FS20:

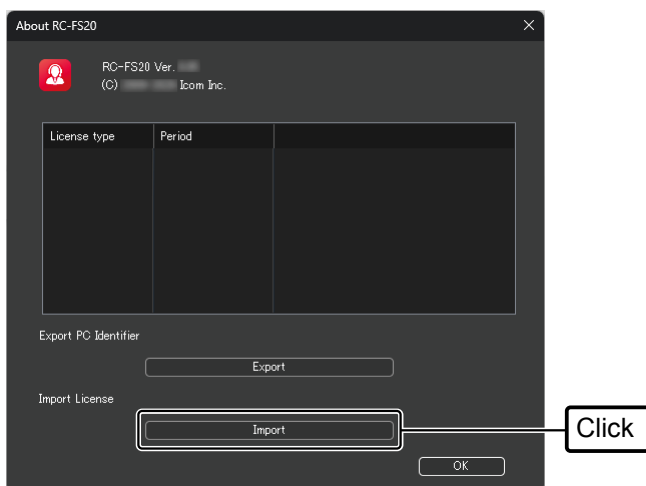
After you have received the License key(s) as a .zip file, import them onto your RC-FS20 to activate the functions.

- 1 Click <⚙> on the upper right of the screen, “Help,” and then “About RC-FS20....”



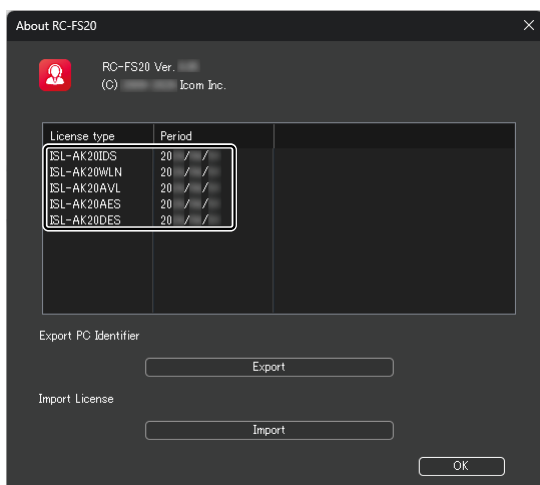
- “About RC-FS20” window is displayed.

- 2 Click <Import>.



- 3 Select the license key (.zip) file that you have received, and then click <Open>.

- “The license file has been imported.” is displayed after the keys have been imported.
- ① The number of displayed license keys varies, depending on the purchased licenses.



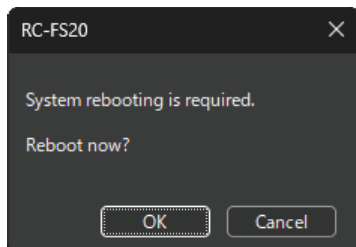
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1 SOFTWARE INSTALLATION

Importing the license keys

4 Click <OK>.

- The dialog lets you restart the system.



5 Click <OK> to restart the software.

- After restarting the software, the The Login Setting screen is displayed.
- ① See the next step to continue the initial settings as the Super User.
- Click <Cancel> to finish the setting.

3. Setting the user names and passwords

1 Enter the Super User name and password, and then click <OK>.

User authority level	Editable settings	User name and password format
Super User	All the settings	8 to 32 characters (case sensitive) ① The Super User password must include uppercase and lowercase letters, numbers, and symbols.
Power User	All the settings except for the network and IP settings	Up to 32 characters (case sensitive)
User	ID List settings only	

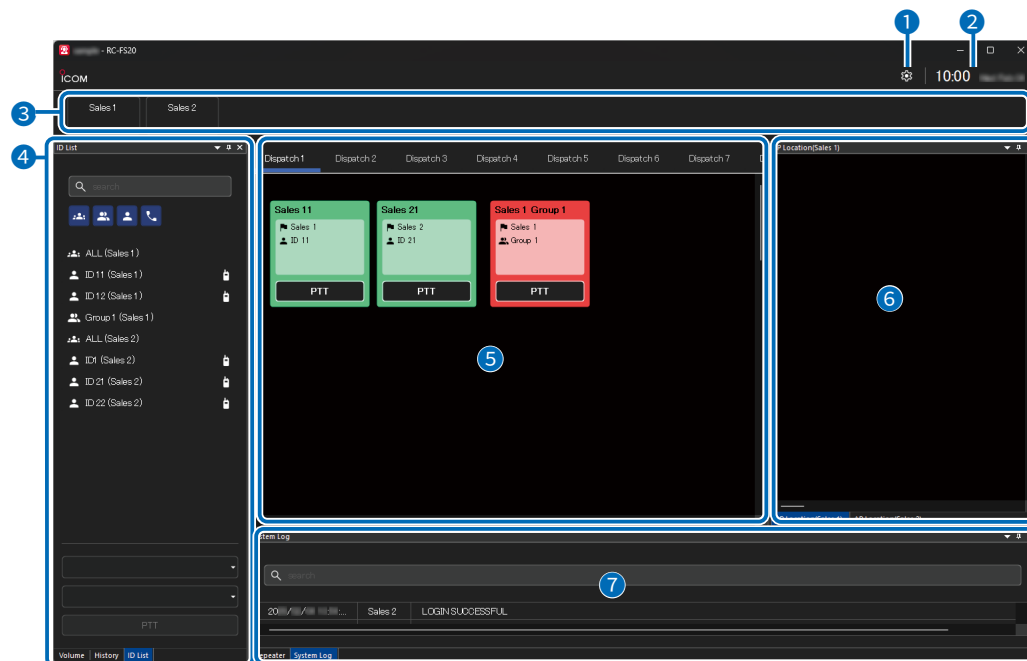
NOTE:

- The Super User and the Power User can set and change the user names and their passwords on the Common Settings screen. (⚙️ > Option > Setting)
- You need to enter the user name and password every time you open the Setting mode or Placement Mode screen. The displayed items differ, depending on the user authority level. Only the Super User and Power User can access the Placement Mode screen.

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The screen description

Main Screen



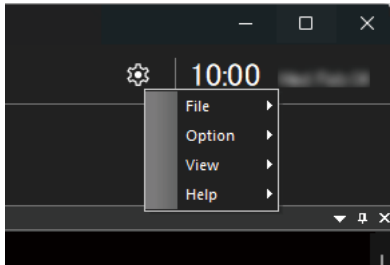
- 1 Menu icon** You can access the menus and functions by clicking the icon.
- 2 Time and Date**..... Displays the current time and date.
- 3 Site window**..... The sites configured on the RC-FS20 and its status are displayed. The volume level control for the site is displayed when pointing a Site icon.
 ① Other than the WLAN mode are settable to Site 1 to 8. Only the WLAN mode can be assigned to the Site 9 to 32.
- 4 ID List window** Displays the entered ID list.
 As default, you can change the window to ID List, History, or Volume adjustment by clicking a tab at the bottom of the window.
- 5 Dispatch screen**..... The Call cards are entered in the window to check the current status of the IDs and make a call.
 In the Placement mode, you can place, and edit the cards.
 ① You can arrange up to 8 dispatch screens and enter up to 1000 cards in a screen.
- 6 AP Location window**..... The WLAN access points in each site are listed, if available.
 You can change the site by clicking the tab at the bottom of the window.
- 7 System Log window** The operating status of all sites are displayed.
 As default, you can change to the Repeater window by clicking the tab at the bottom of the window.

NOTE: By clicking the pin icon (📌) on the upper right, you can make the window float, fixed, or invisible. You can also display or hide windows by checking or unchecking in the View menu. (⚙️ > View)

The screen description

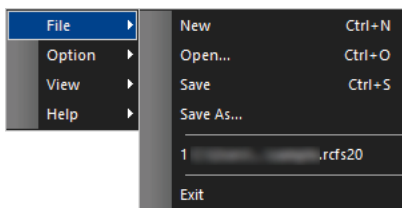
■ Main menu

Click <⚙> on the upper right of the screen to access the main menu.



◇ File

The File menu contains submenus that you use to create, open, save, and print the data files, and to exit the software.

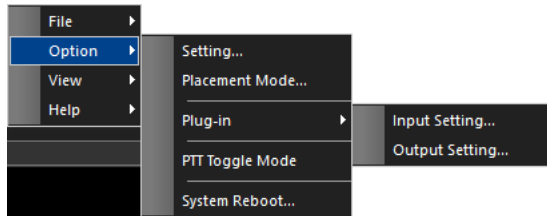


- **New (Ctrl+N)**
Click to create a new RC-FS20 data file.
- **Open... (Ctrl+O)**
Click to open an RC-FS20 data file.
- **Save (Ctrl+S)**
Click to save the current file or overwrite a previously saved data file.
- **Save As...**
Click to save the current file under a different name or to another location.
- **(Recent files)**
Displays up to 4 recently used files. Select a file to open it.
- **Exit**
Click to close the software.

The screen description

■ Main menu

◇ Option



● Setting...

Click to access the Common Settings and Site Settings window.

When you click this button, the Login dialog is displayed. Enter the user name and password.

NOTE: No data is entered when the RC-FS20 is installed for the first time.
Enter the Site settings and ID List first, and save the settings to a file.

● Placement Mode...

Enters the Placement mode to place buttons in the dispatch window.

When you click this button, the Login dialog is displayed. Enter the user name and the password.

To exit the Placement mode, select the Placement mode again to uncheck the menu.

● Plug in

Sets the audio input and output device to use on the RC-FS20 from the list.

- Input Setting...: Select an audio input device to use for the system.

① To use the CT-23 PTT MICROPHONE ADAPTER, you need to check the “Use PTT Function” check box.

NOTE:

- The microphone recording level is adjusted with the Windows system volume level.
- The Input Interface uses the 16 bit/48 kHz sampling rate.

NOTE on the CT-23:

- The CT-23 audio communication contains a high-pitched tone that most people cannot hear. However, if you do hear it, reduce the PC’s audio volume.
- If the booster, amplifier, or filtering function is set in the microphone interface, deactivate them.
- If the microphone’s PTT malfunction occurs, adjust the microphone recording level properly.

- Output Setting...: Select an audio output device to use for the system.

● PTT Toggle Mode

Selects the operation of the <PTT> button on the screen.

- Checked (✓): The <PTT> button functions as the One-touch PTT. Clicking <PTT> toggles the transmit and receive.
- Unchecked: Transmits only while <PTT> is held.

● System Reboot...

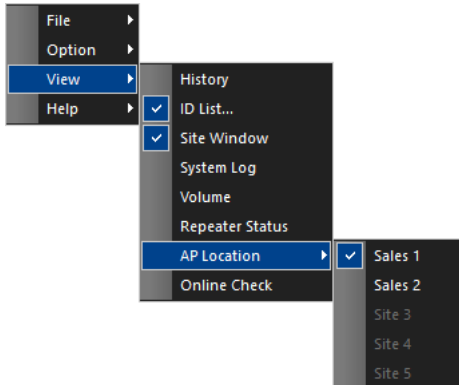
Terminates the communication and reloads the setting file.

The screen description

■ Main menu

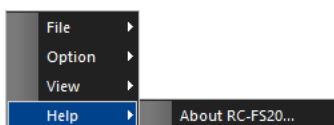
◇ View

Check or uncheck the windows to make them visible or invisible.



- **History**
Displays the recently called IDs.
- **ID List**
Lists the registered IDs.
- **Site Window**
Displays the sites configured on the RC-FS20 and their status.
- **System Log**
Displays the operating statuses of all sites.
- **Volume**
Individually adjusts the volume level of the sites.
- **Repeater Status**
Displays the repeater status.
- **AP location**
Displays the available access points for the WLAN area call.
- **Online Check**
Displays the window to check the status of IDs on the site.

◇ Help



- **About RC-FS20**
Displays the software version, the imported license keys, and the expiration period date of each key. You can also export the PC Identifier to a file or import the License keys provided by your distributor.

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Dispatching operation overview

The following shows a typical procedure for dispatching the transceivers on the RC-FS20.

1 Set the initial settings to the RC-FS20.

( > Option > Setting > Common Settings)

At least the following items must be set:
Super User Name, Password.

2 Configure the detailed settings on Site 1.

( > Option > Setting > Site Settings)

Configure the detailed settings on Site 1.

At least the following items must be customized:
Mode, the required settings for registration to your system (such as Unit ID, Server Address, Port Numbers, and so on).

3 Add the IDs to the ID List in Site 1.

( > Option > Setting > Site Settings > Site 1 > ID List)

At least the following items must be entered:
Call Type, Alias Name, and ID

4 Repeat Steps 2 and 3 to configure Site 2 (and Sites 3 or more, if necessary).

- The added sites are displayed in the Site window.

5 Enter the Placement mode.

( > Option > Placement Mode)

6 Add Call cards to the Dispatch screen.

Right-click on the Dispatch screen, and then click "New Card."

At least the following items must be entered on the Card Settings screen:
Site, To, PTT function ON/OFF.
① Be sure to arrange the cards so they do not overlap.

7 Exit the Placement mode.

( > Option > Placement Mode (uncheck))

- ① Be sure that the Site and cards are not marked with the caution (.

8 Adjust the volume level for each site.

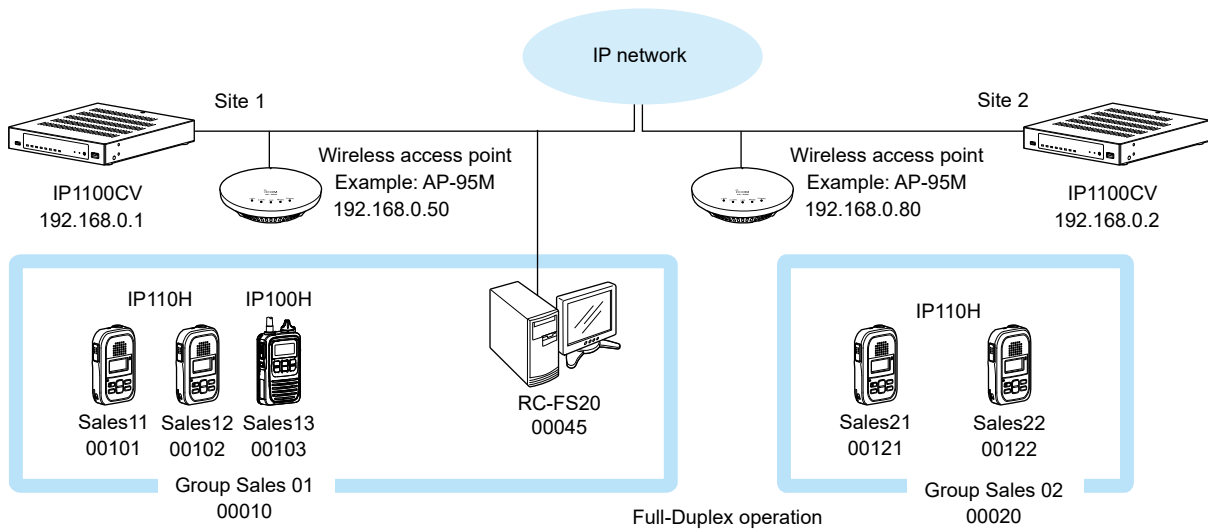
- ① Adjust the volume in the Volume window.
① Pointing over a Site button also displays the Volume level adjuster.

Configuring the WLAN transceiver system

■ Dispatching WLAN mode sites

This section describes how to dispatch on the RC-FS20 in 2 WLAN mode sites, as an example.

- Each terminal requires that you set the unit ID and so on.
- Connect a wireless access point to the Controller network.
- In this manual, it is assumed that the IP address of PCs using WLAN transceiver or RC-FS20 is automatically obtained from the DHCP server in the same network as the Site 1 Controller.
- When assigning static IP addresses to the terminals, make sure that the addresses of the devices on the network don't overlap or conflict.



Configuring the WLAN transceiver system

⚙️ > Option > Settings > Common Settings

Common Settings

For the first time you open the Dispatcher software, you are required to enter Super User name and password. After entering them, “Common Settings” screen is displayed. Do the initial settings for the RC-FS20.

- 1 Confirm the Super User name and Password are correctly set, and then set Power User and User names and passwords, if necessary. (1)
 ① Refer to the table below for details on the user authority level.

TIP:

- If you want to use a key on your PC's keyboard as [PTT] button, set Key Code. (2)
- If you need to manually select the audio devices, select “Input Plug-in” for audio input device such as a microphone, and “Output Plug-in” for audio output device such as a speaker or headset. (3)

- 2 Set the minimum volume setting, if necessary. (4)

The screenshot shows the 'Common Settings' window. Callout 1 points to the 'Super User' section, specifically the 'Name' and 'Password' fields. Callout 2 points to the 'Keyboard PTT' section, specifically the 'Key Code' field. Callout 3 points to the 'Plug-in' section, specifically the 'Input Plug-in' and 'Output Plug-in' dropdown menus. Callout 4 points to the 'Volume Setting' section, specifically the 'Min' dropdown menu.

User authority level	Editable settings	User name and password format
Super User	All the settings	8 to 32 characters (case sensitive) ① The Super User password must include uppercase and lowercase letters, numbers, and symbols.
Power User	All the settings except for the network and IP settings	Up to 32 characters (case sensitive)
User	ID List settings only	

CAUTION: If you have forgotten the password, you cannot access the dispatcher setting screen. In this case, you have to reinstall the software.

Configuring the WLAN transceiver system

⚙️ > Option > Settings > Site Settings

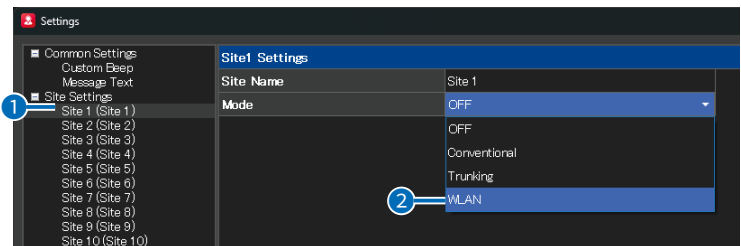
■ Site Settings

Next, configure the Site 1 settings to the WLAN mode, and set details.

- 1 Click "Site 1" in the left column on the Setting screen. (1)

- 2 In the Mode, select "WLAN." (2)

- The setting items for WLAN mode site is displayed.



- 3 Properly set the items according to your system configuration. At least you need to set the following items. (3)

Unit Setting

- Tenant ID
- Unit ID

Network Setting

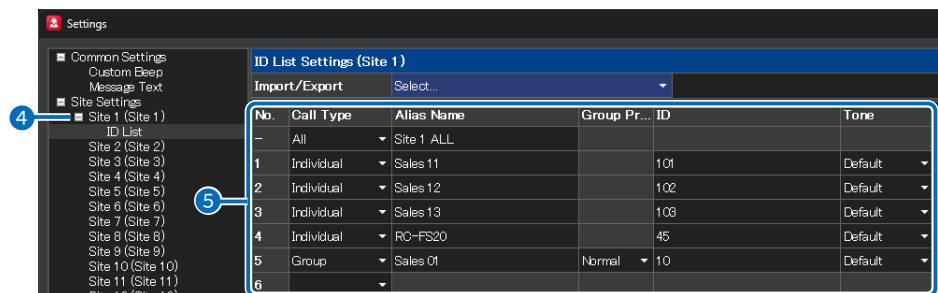
- Server Address
- Source Port Number
- Server Port Number

Unit Setting	
Tenant ID	1
Unit ID	1
Password	iptrx
Network Setting	
Server Address	192.168.0.1
Source Port Number	30000
Server Port Number	30002
Registration Interval (Sec)	60
Receive Buffer Size (mSec)	40

- 4 Double click "Site 1" in the left column on the Settings screen, and then click ID List. (4)

- "ID List Settings" screen is displayed.

- 5 Add IDs in Site 1. (5)



- 6 Repeat the steps 1 to 5 to add Site 2 or more settings.

- 7 Click <OK> to apply the settings when all the sites and ID settings are finished.

Configuring the WLAN transceiver system

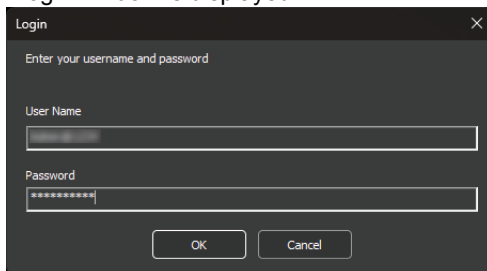
⚙️ > Option > Placement Mode

■ Dispatching the Call cards

After the Common Settings and Site Settings, you can dispatch the Call cards on the Dispatch screen. Follow the steps to dispatch the Call cards.

1 Click ⚙️ > Option > Placement Mode to enter the Placement mode.

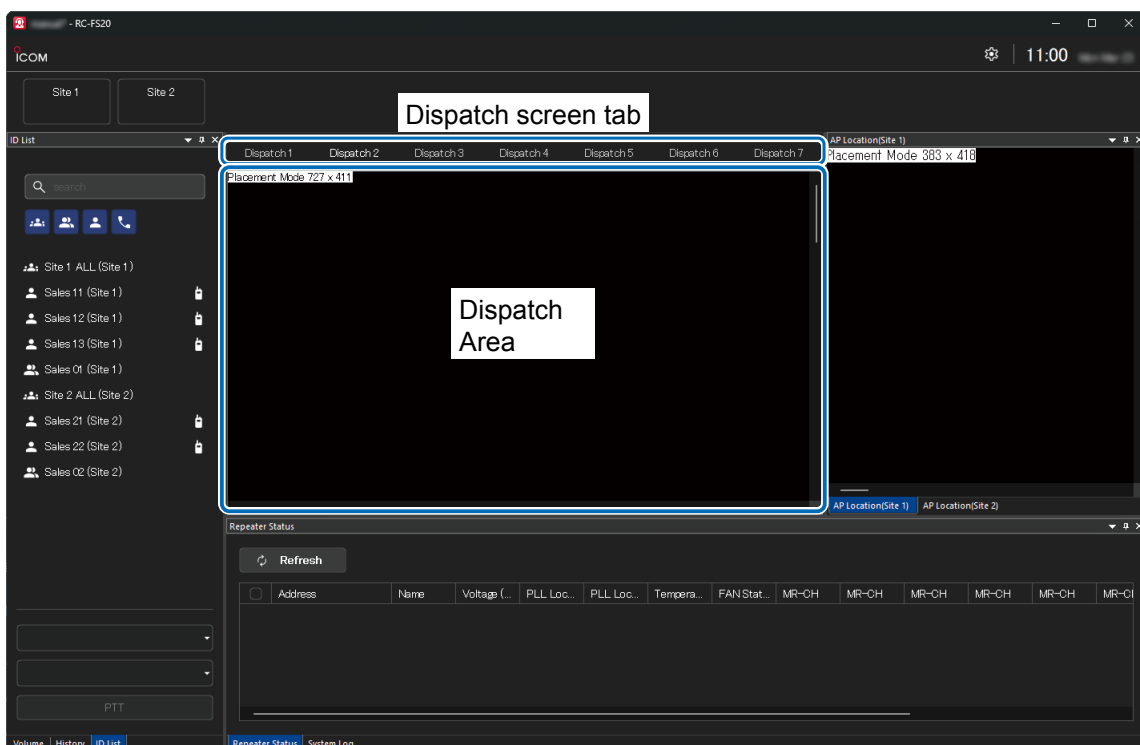
- Login window is displayed.



A login window titled 'Login' with a close button (X). It contains the text 'Enter your username and password'. Below this are two input fields: 'User Name' and 'Password'. The 'Password' field has asterisks for masking. At the bottom are 'OK' and 'Cancel' buttons.

2 Enter the Super User or Power User name and password, and then click <OK>.

- The Dispatcher software enters the Placement mode. In the mode, the dispatch screen size (by pixel) is displayed.
- ① You can change the dispatch screen by clicking the tab at the top of the dispatcher screen.



3 Right-click in the dispatch area, and then click “New Card.”

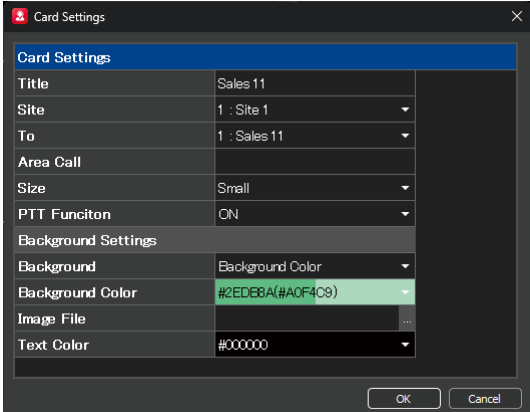
3 DISPATCHING OPERATION

Configuring the WLAN transceiver system

■ Dispatching the Call cards

- 4 Enter the card settings, and then click <OK>. At a minimum, the following items must be set.

- Site: Select a Site Number from the list.
 - To: Select an ID from the list.
- The set card is placed in the dispatch area.
- ① You can drag the card to move it within the window, or drag a corner of the card to resize it to one of 3 sizes.



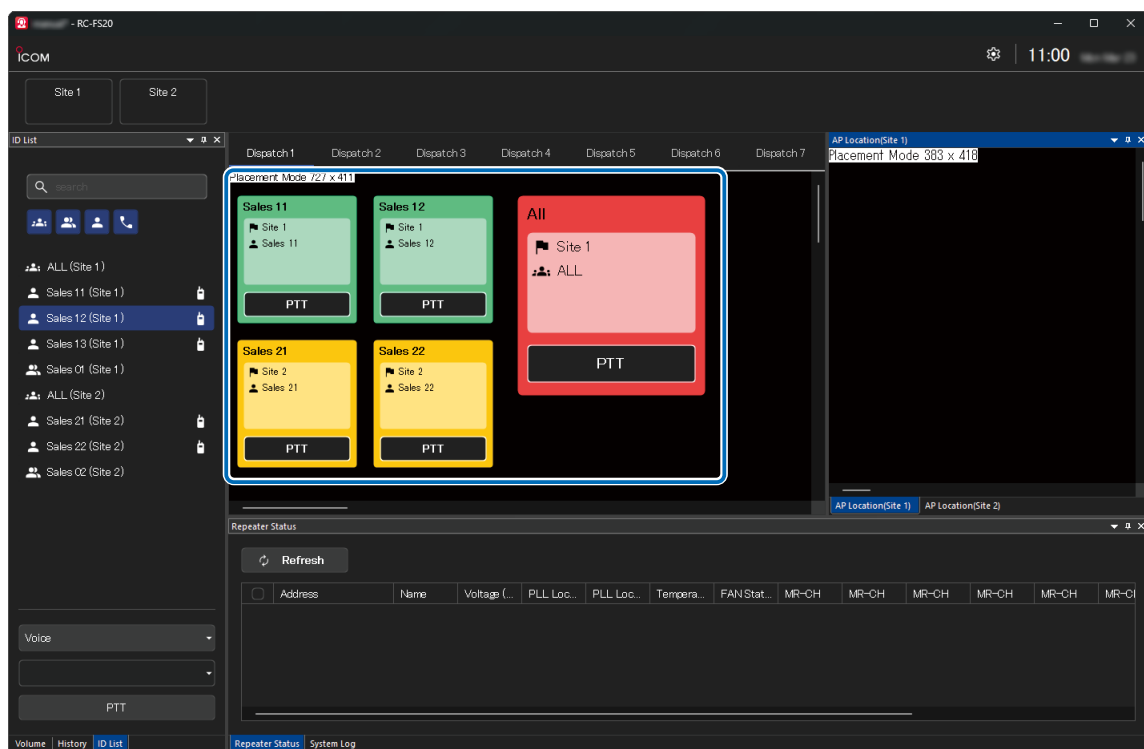
The Card Settings dialog box contains the following fields:

Card Settings	
Title	Sales 11
Site	1 : Site 1
To	1 : Sales 11
Area Call	
Size	Small
PTT Function	ON
Background Settings	
Background	Background Color
Background Color	#2ED8BA(#A0F4C9)
Image File	
Text Color	#000000

Buttons: OK, Cancel

- 5 Repeat Step 4 to place more cards, if necessary.

- ① Be sure not to overlap the cards.



- 6 Uncheck the Placement Mode in the Option menu to exit the Placement mode.

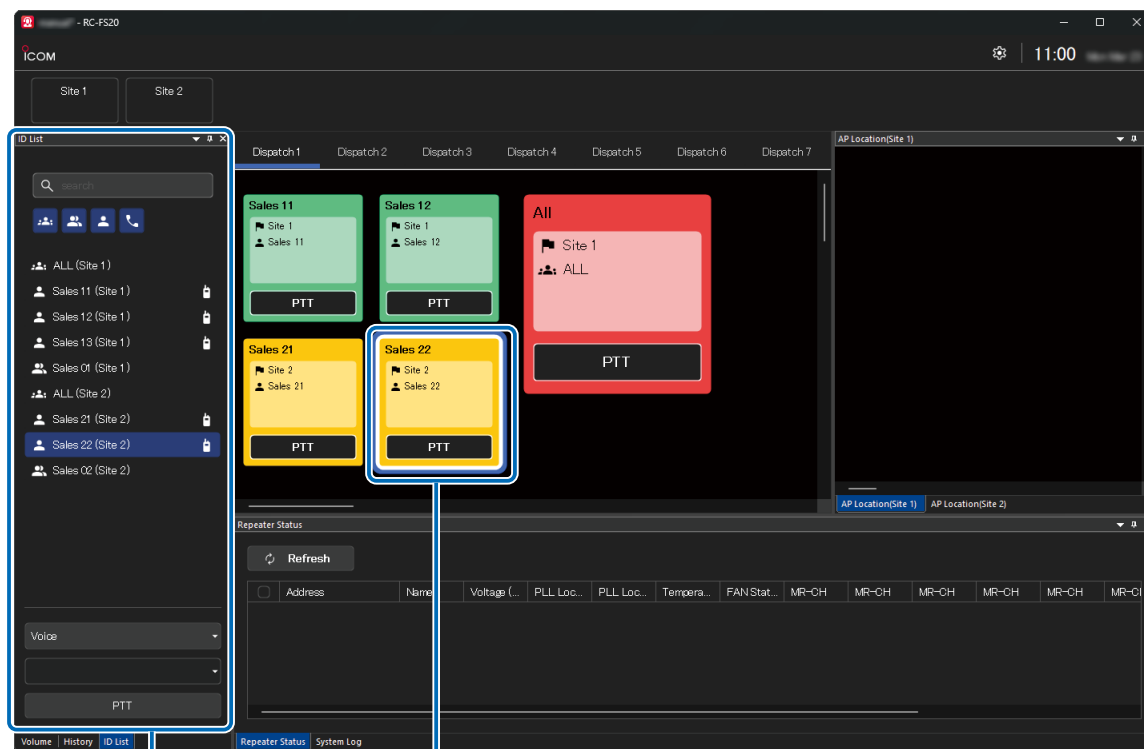
(⚙ > Option > Placement Mode)

- Exits the Placement mode and returns to the operation mode.

Configuring the WLAN transceiver system

■ Transmitting a call

You can transmit a call using the dispatched cards or the ID List.



Select an ID from the list, and then hold <PTT> to transmit.

Click a card, and then hold <PTT> to transmit.

TIP: If you want to use the One-touch PTT function on the Dispatcher software, check “PTT Toggle Mode” in the Option menu. (⚙️ > Option > PTT Toggle Mode)

