OPERATING GUIDE

DISPATCHER SOFTWARE

RC-FS20

INTRODUCTION

1 COMMON SETTINGS

2 SITE SETTINGS

Icom Inc.

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.

About this manual

This OPERATING GUIDE describes the details on the setting items of the dispatcher software.
Refer to the INSTALLATION GUIDE for the basic operation on setting up the system.

• 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 1.08.
  • The IP1100CV firmware version 1.10.
  • The VE-PG4 firmware version 1.71.

Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:
• 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.

ALL RIGHTS RESERVED. This document contains material protected under International and Domestic Copyright Laws and Treaties. Any unauthorized reprint or use of this material is prohibited. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without express written permission from Icom Incorporated.
All stated specifications and design are subject to change without notice or obligation.

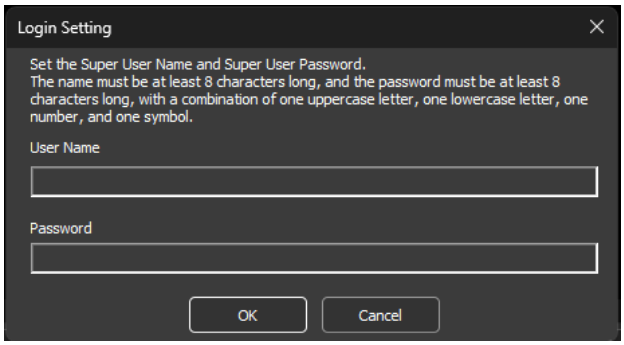
Icom and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries.
Microsoft, Windows, Windows Server are trademarks of the Microsoft group of companies.
All other products or brands are registered trademarks or trademarks of their respective holders.

Accessing the Setting screen

When you open the Dispatcher software for the first time, you must set a Super User Name and Super User Password.
After entering them, the Common Settings screen is displayed.

1 Click “⚙, ” “File,” and then “New.”

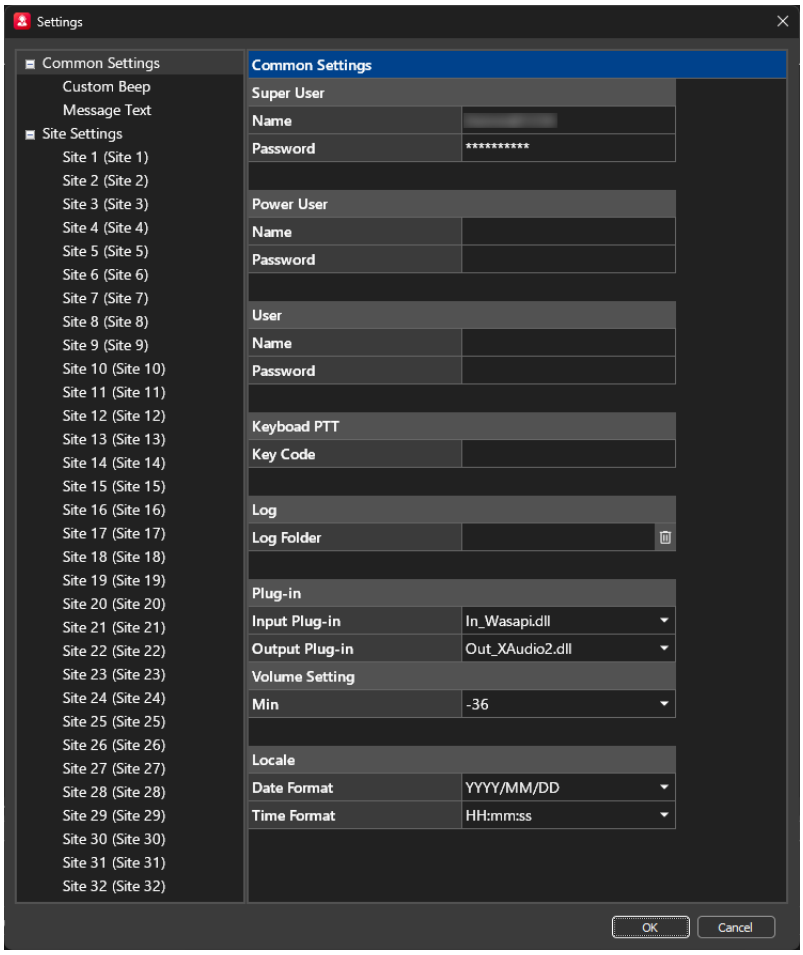
• The Login Setting screen is displayed.



ⓘ If you want to edit an existing setting file, click “Open” to select the file.

2 Enter a Super User Name and Password, and then click <OK>.

• The Common Settings screen is displayed.



COMMON SETTINGS

Section 1

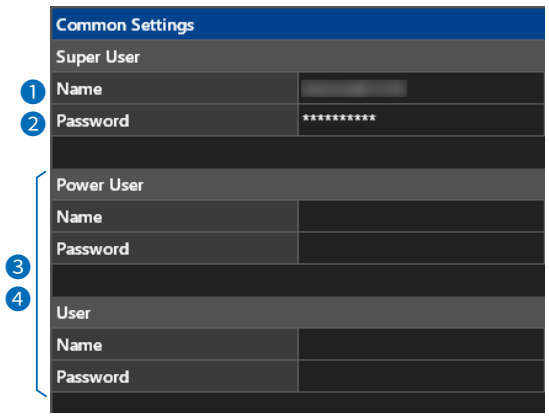
Common Settings 1-2
■ Common Settings 1-2
■ Custom Beep 1-4
■ Message Text 1-5

Common Settings

> Option > Setting > Common Settings

■ Common Settings

The Common Settings screen contains the initial settings to use the Dispatcher software on a PC.



The editable settings differ according to user authority levels. See the table below for details.

Super User

1 Name ..... The Super User Name is displayed.

2 Password ..... The Super User Password is masked with asterisks (*).

Power User
User

3 Name ..... Set a username for the Power User or User.

4 Password ..... Set a password for the Power User or User.

User authority level	Editable setting item	User name and password format
Super User	All the settings	8 to 32 characters (case sensitive) ⓘ 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	

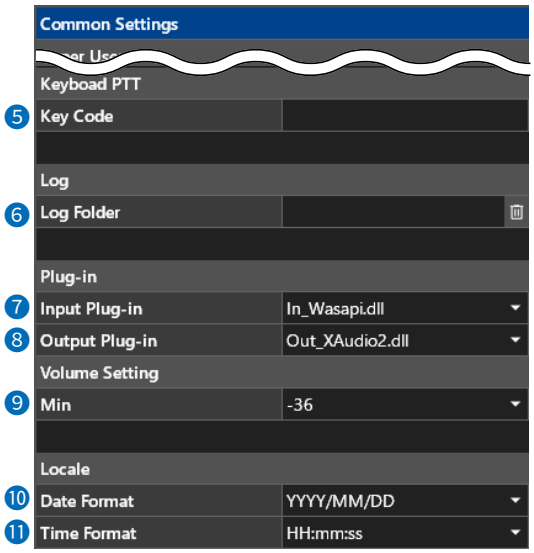
Usable characters: A to Z, a to z, 0 to 9, !\"#$%&/*'()-+.,?_<>@`=~^|{}[];:

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

Common Settings

⚙ > Option > Setting > Common Settings

■ Common Settings



Keyboard PTT

5 Key Code ..... Press a key on your keyboard that you want to use as the PTT key.

Log

6 Log Folder ..... Click the field to select a desired location where you want to save logs.
ⓘ Click [🗑] to delete the log folder.

Plug-in

7 Input Plug-in ..... Select an audio input device (.dll file) for the system, such as a microphone. (Default: In_Wasapi.dll)
ⓘ The default setting is commonly used.

8 Output Plug-in ..... Select an audio output device (.dll file) for the system, such as a speaker or headset. (Default: Out_XAudio2.dll)
ⓘ The default setting is commonly used.

Volume Setting

9 Min ..... Set the minimum audio volume of the system. (Default: –36)
Range: 0 ~ –36

Locale

10 Date Format ..... Select a data format. (Default: YYYY/MM/DD)
Options: YYYY-MM-DD, YYYY/MM/DD, YYYY-M-D, YYYY/M/D,
YY-MM-DD, YY/MM/DD, YY-M-D, YY/M/D,
MM-DD-YYYY, MM/DD/YYYY, M-D-YYYY, M/D/YYYY,
MM-DD-YY, MM/DD/YY, M-D-YY, M/D/YY,
DD-MM-YYYY, DD/MM/YYYY, D-M-YYYY, D/M/YYYY,
DD-MM-YY, DD/MM/YY, D-M-YY, D/M/YY,
MM-DD, MM/DD, M-D, M/D,
DD-MM, DD/MM, D-M, D/M

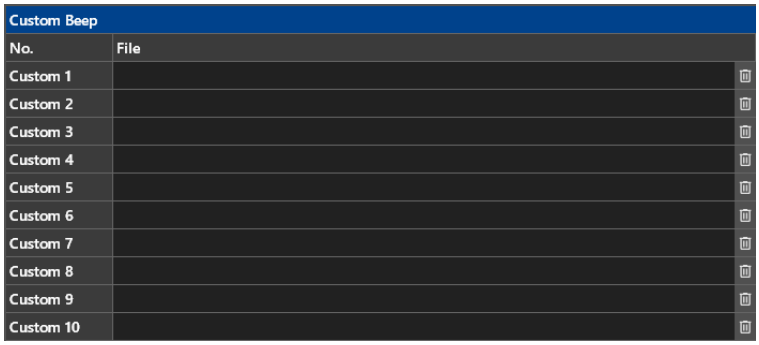
11 Time Format ..... Select a time format. (Default: HH:mm:ss)
Options: HH:mm:ss, hh:mm:ss tt, H:m:s, h:m:s tt

Common Settings

> Option > Setting > Common Settings > Custom Beep

■ Custom Beep

Up to 10 audio tones (.wav files) can be set as custom beeps.
These custom beeps are listed in the Tone settings.



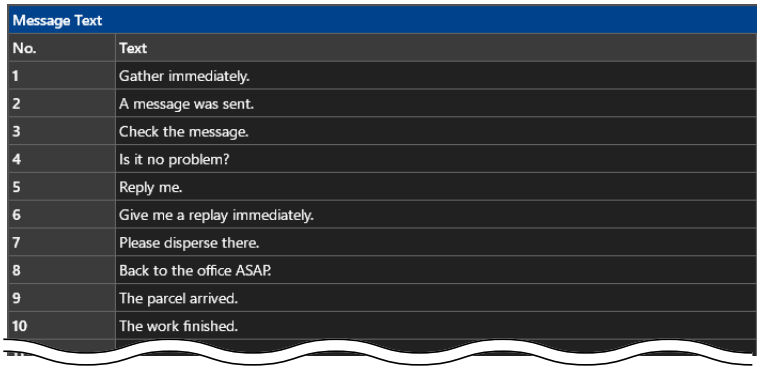
File ..... Click a File field to select a WAV file.
After selecting a file, its file path is displayed in the File field.
ⓘ Make sure to save the WAV file on your PC before selecting it.
ⓘ Click [🗑] to delete the WAV file.

Common Settings

> Option > Setting > Common Settings > Message Text

■ Message Text

Up to 100 messages can be saved as presets.
The saved messages can be selected in the ID List window.



Message Text	
No.	Text
1	Gather immediately.
2	A message was sent.
3	Check the message.
4	Is it no problem?
5	Reply me.
6	Give me a replay immediately.
7	Please disperse there.
8	Back to the office ASAP.
9	The parcel arrived.
10	The work finished.

Text ..... Enter a message of up to 50 characters.

Usable characters: Numbers, alphabetic letters (case sensitive), and the following symbols.
!\"#$%&/*'()-+.,?_<>@`=~^|{}[];:

SITE SETTINGS

Section 2

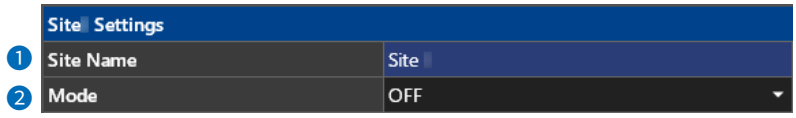
Site Settings 2-2
- ■ Site Settings (General) 2-2
- ■ Site Settings (in the Conventional mode) 2-7
- ■ Status Call (in the Conventional mode) 2-19
- ■ Encryption (in the Conventional mode) 2-20
- ■ ID List Settings (in the Conventional mode) 2-21
- ■ Site Settings (in the Trunking mode) 2-22
- ■ Status Call (in the Trunking mode) 2-37
- ■ Encryption (in the Trunking mode) 2-38
- ■ Repeater List (in the Trunking mode) 2-39
- ■ ID List Settings (in the Trunking mode) 2-40
- ■ Site Settings (in the RoIP Gateway (IDAS) mode) 2-42
- ■ Encryption (in the RoIP Gateway (IDAS) mode) 2-45
- ■ ID List Settings (in the RoIP Gateway (IDAS) mode) 2-46
- ■ Site Settings (in the RoIP Gateway (DCR) mode) 2-48
- ■ Encryption (in the RoIP Gateway (DCR) mode) 2-51
- ■ ID List Settings (in the RoIP Gateway (DCR) mode) 2-52
- ■ Site Settings (in the dPMR Mode2 mode) 2-53
- ■ Status Call (in the dPMR Mode2 mode) 2-62
- ■ Scrambler (in the dPMR Mode2 mode) 2-63
- ■ ID List Settings (in the dPMR Mode2 mode) 2-64
- ■ Site Settings (in the WLAN mode) 2-65
- ■ ID List Settings (in the WLAN mode) 2-71

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (General)

A total of 32 sites can be set on the dispatcher software.



1 Site Name ..... Enter the name of the Site of up to 16 characters (Case sensitive).

2 Mode ..... Select the mode of the Site. (Default: OFF)
The detailed setting items will be displayed according to the selected mode. Refer to the setting item list (pp. 2-3 ~ 2-6) for editable setting items in each mode.

Options: (As of July 2026)
- OFF: Makes the Site as not used.
- Conventional: Select to connect to an NXDN Conventional site.
- Trunking: Select to connect to an NXDN Trunking site.
- RoIP Gateway (IDAS): Select to connect to the USA, EUR, or AUS version of the VE-PG4.
- RoIP Gateway (DCR): Select to connect to the JPN version of the VE-PG4.
- dPMR Mode2: Select to connect to a dPMR Mode2 site.
- WLAN: Select to connect to a Wireless LAN (WLAN) site.

ⓘ The selectable modes vary, depending on your license agreement.
ⓘ “Conventional,” “Trunking,” “RoIP Gateway (IDAS), “RoIP Gateway (DCR),” and “dPMR Mode2” are selectable for only the Sites 1 ~ 8.
Only “OFF” or “WLAN” is selectable for the Sites 9 ~ 32.
ⓘ To communicate with the Conventional or Trunking mode site, a CT-24 DIGITAL VOICE CONVERTER is required for each site.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (General)

Setting item list

Setting item	Conventional	Trunking	RoIP Gateway (IDAS)	RoIP Gateway (DCR)	dPMR Mode2	WLAN
Site Name	✔	✔	✔	✔	✔	✔
Mode	✔	✔	✔	✔	✔	✔
Beep/Ringer						
Ringer On Receive			✔	✔		
Ringer On Receive (Individual Call)	✔	✔			✔	✔
Ringer On Receive (Group Call)	✔	✔			✔	✔
Ringer On Receive (All Call)	✔	✔			✔	✔
Ringer On Receive (Telephone Call)						✔
Over Ringer	✔	✔			✔	
TX R.T.T Beep	✔	✔			✔	
Error Beep		✔				
Clear Down Beep					✔	
TOT Notice Beep	✔	✔	✔	✔	✔	✔
TOT Beep	✔	✔	✔	✔	✔	✔
Target Availability Check Success Beep						✔
Target Availability Check Failure Beep						✔
SDM Ringer	✔	✔			✔	✔
Call Alert Ringer	✔	✔				
RAN						
TX RAN	✔					
CC						
RX CC					✔	
TX CC					✔	
Voice Codec						
Voice Codec			✔	✔		
TOT						
TOT Timer (Sec)	✔	✔	✔	✔	✔	✔
Penalty Time (Sec)	✔	✔			✔	✔
TOT Reset Timer (Sec)	✔	✔			✔	
TOT on Telephone Call						✔
TalkBack						
TalkBack Timer (Sec)	✔	✔	✔	✔	✔	✔
RX Type	✔	✔			✔	
All Call						
RX All Call		✔				
Broadcast Call						
RX					✔	
Communication Method						
Communication Method						✔
Call Type Priority						
Call Type Priority						✔
Target Availability Check						
Target Availability Check						✔

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (General)

Setting item list

Setting item	Conventional	Trunking	RoIP Gateway (IDAS)	RoIP Gateway (DCR)	dPMR Mode2	WLAN
SDM						
RX	✔	✔			✔	
Request Ack	✔	✔			✔	
Transmit						
Number of Data Resend						✔
Data Resend Wait Time (mSec)						✔
Emergency						
Send Ack (Group)	✔	✔				
Send Ack (All Call)	✔	✔				
Radio Check						
RX	✔	✔				
Stun						
Stun	✔	✔			✔	✔
Stun Mode	✔	✔				✔
Status Number					✔	
Revive						
Revive	✔	✔			✔	✔
Status Number					✔	
Kill						
Kill	✔	✔			✔	✔
Status Number					✔	
Remote Monitor						
Remote Monitor					✔	✔
TX Timer (Sec)	✔	✔			✔	✔
Remote Monitor Mode	✔	✔				✔
Status Number					✔	
Call Alert						
Call Alert RX	✔	✔				
Call Alert Request Ack	✔	✔				
Encryption						
Key ID	✔	✔	✔	✔		
Decryption multiple keys	✔					
Scrambler						
Key ID					✔	
Trunking Setting						
Site Code		✔				
Area Bit		✔				
Message Trunking		✔				
ATB Ring Back		✔				

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (General)

Setting item list

Setting item	Conventional	Trunking	RoIP Gateway (IDAS)	RoIP Gateway (DCR)	dPMR Mode2	WLAN
Common Setting						
Ack TX Delay [x100 (mSec)]	✔	✔			✔	
Ack RX Wait [x100 (mSec)]	✔	✔			✔	
Attempt No	✔	✔			✔	
Silence Timer [x80 (mSec)]	✔	✔			✔	
Delayed Header	✔	✔				
Wake-Up Header					✔	
Unit Setting						
Tenant ID						✔
Prefix ID		✔	✔			
Unit ID	✔	✔	✔	✔	✔	✔
Group Prefix ID		✔				
Group ID Start					✔	
Group ID	✔	✔				
Password						✔
Priority Group						
ON		✔				
Prefix ID		✔				
Group ID		✔				
RX Broadcast Group						
ON		✔				
Prefix ID		✔				
Group ID		✔				
Network Setting						
Transmission Mode			✔	✔		
Network Adapter			✔	✔		
Destination Address	✔		✔	✔	✔	
Site Master Address		✔				
Server Address						✔
TCP Port (Connection)	✔				✔	
UDP Port (Data)	✔				✔	
Destination Port		✔	✔	✔		
Source Port		✔	✔	✔		
Multicast TTL			✔	✔		
Source Port Number						✔
Server Port Number						✔
Registration Interval (Sec)						✔
Health Check Interval (Sec)		✔				
Receive Buffer Size (mSec)	✔	✔			✔	✔
Keycode	✔	✔			✔	
Packet Encryption	✔				✔	
Common Key	✔				✔	

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (General)

Setting item list

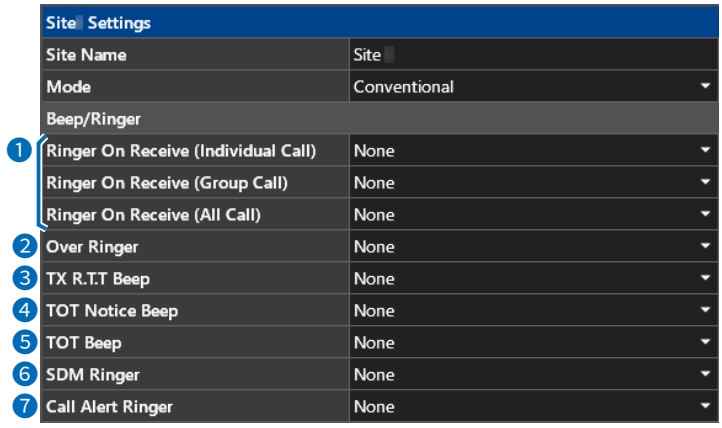
Setting item		Conventional	Trunking	RoIP Gateway (IDAS)	RoIP Gateway (DCR)	dPMR Mode2	WLAN
IP Command Setting							
	Destination Address	✔				✔	
	TCP Port	✔				✔	
	Name	✔				✔	
	Status Check Interval (Min)	✔	✔			✔	
Base MR-CH Setting							
	Base MR-CH Number 1-10	✔					

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)

In the Conventional mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

1 Ringer On Receive (Individual Call, Group Call, All Call) ..... Rings when an Individual, Group, or All call is received. (Default: None)

2 Over Ringer ..... Rings when a call reception finishes. (Default: None)

3 TX R.T.T Beep ..... Rings when the transceiver is ready to transmit a voice signal to avoid cutting off the beginning part of the signal. (Default: None)

4 TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

5 TOT Beep ..... Rings when a transmission exceeds the set time period and is forcibly stopped by the TOT. (Default: None)

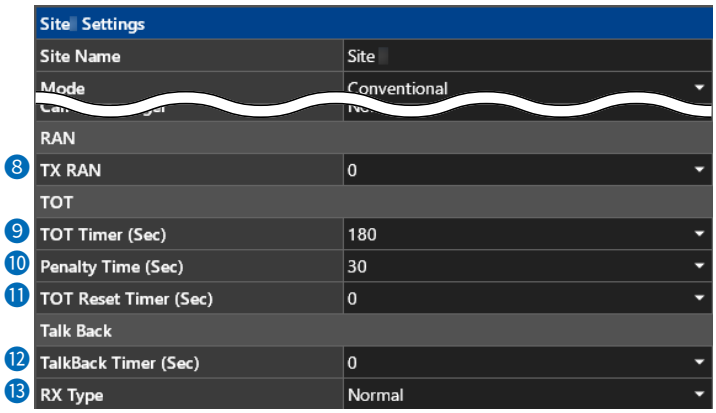
6 SDM Ringer ..... Rings when a Message is received. (Default: None)

7 Call Alert Ringer ..... Rings when a Call Alert call is received. (Default: None)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



RAN

8 TX RAN ..... Set a Radio Access Number (RAN) to transmit from the RC-FS20. RAN codes are used to separate the transceiver from the same or adjacent channel station, according to the assigned code. "0" (a decimal number) is a special code that matches any RAN. Range: 0 ~ 63 (Default: 0)

TOT

9 TOT (Sec) ..... Set the Time-out Timer (TOT). If a continuous transmission exceeds the set time period, it will be forcibly stopped. (Default: 180) Range: 0 ~ 255 (seconds)

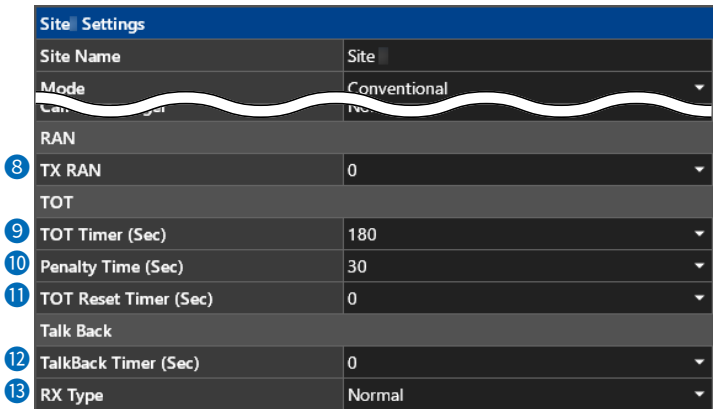
10 Penalty Time (Sec) ..... Set the TOT Penalty time. After the TOT expires, the Penalty Time starts and inhibits the user from transmitting for the set time period. (Default: 30) Range: 0 ~ 255 (seconds)

11 TOT Reset Timer (Sec) ..... Set the TOT Reset Timer time. When releasing [PTT] before the TOT expires, the TOT Reset Timer starts. The TOT Timer will reset itself if the user does not push [PTT] again for the set time period. (Default: 0) Range: 0 ~ 15 (seconds)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Talk Back

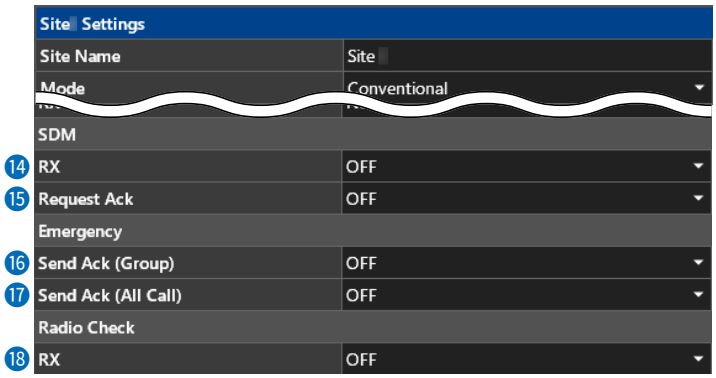
⑫ TalkBack Timer (Sec) ..... The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period.
To disable the TalkBack function, set this item to "0." (Default: 0)
Range: 0 (disabled) ~ 255 (seconds)

⑬ RX Type ..... Select an option for the TalkBack function if the received call is a digital signal. (Default: Normal)
Options:
- Normal: The TalkBack function will be activated when a voice, Status, Message, or Call Alert call is received.
- Voice Only: The TalkBack function will be activated only when a voice call is received.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



SDM

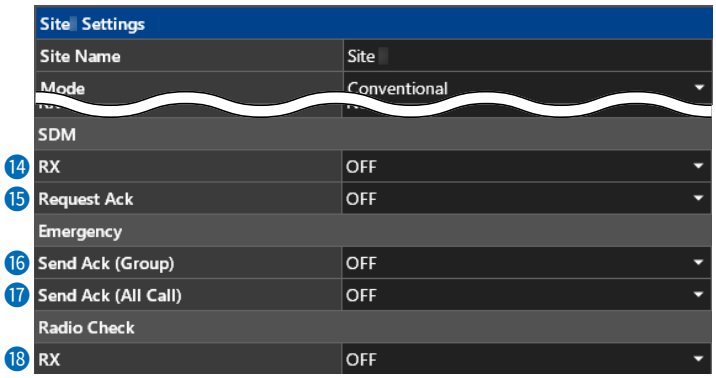
⑭ RX ..... Select whether to receive Messages on Individual, Group, and All calls. "OFF" does not receive Messages. (Default: OFF)

⑮ Request Ack ..... Select whether to request a status acknowledgment from the target station. The Request Ack is not available for Group calls. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Emergency

⑯ Send Ack (Group) ..... Select whether to send an acknowledgment when an Emergency call is received for a Group call. (Default: OFF)

⑰ Send Ack (All Call)..... Select whether to send an acknowledgment when an Emergency call is received for an All call. (Default: OFF)

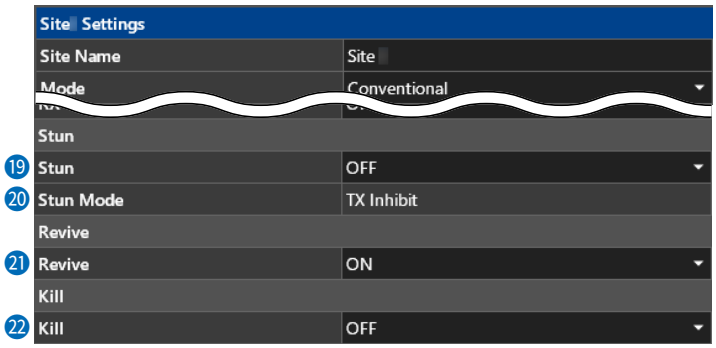
Radio Check

⑱ RX ..... Select whether to receive Radio Check calls.
A Radio Check call can determine whether a target station is within communication range and on channel, without requiring any action by the target station user. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Stun

⑲ Stun ..... Select whether to transmit Stun commands. A Stun command remotely disables the transceiver. Transmitting a Revive command to a stunned transceiver is necessary to operate the stunned transceiver again. (Default: OFF)

⑳ Stun Mode ..... Select the capabilities of the stunned transceiver. (Default: TX Inhibit)
Options:
- TX Inhibit: Inhibits the stunned transceiver from transmitting.
- TX&RX Inhibit: Inhibits the stunned transceiver from transmitting and receiving.

Revive

㉑ Revive ..... Select whether to transmit Revive commands.
Transmitting a Revive command restores a stunned transceiver to normal operation. (Default: ON)

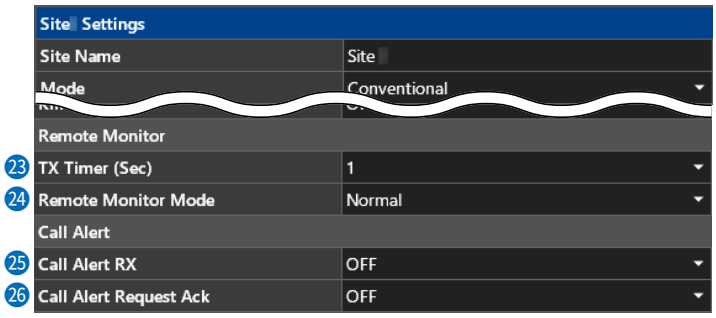
Kill

㉒ Kill ..... Select whether to transmit Kill commands.
A Kill command remotely disables the transceiver. The killed transceiver must be reprogrammed to operate the transceiver again. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Remote Monitor

23 TX Timer (Sec) ..... Set the time period so that the target transceiver transmits its microphone audio after receiving a Remote Monitor call. (Default: 1)
Range: 1 ~ 255 (seconds)

24 Remote Monitor Mode ..... Select the status of the target transceiver's indicator while transmitting its microphone audio after receiving a Remote Monitor call.
(Default: Normal)

Options:
- Normal: The receiving transceiver's Status indicator lights while transmitting.
- Silent: The receiving transceiver's Status indicator does not light while transmitting.

Call Alert

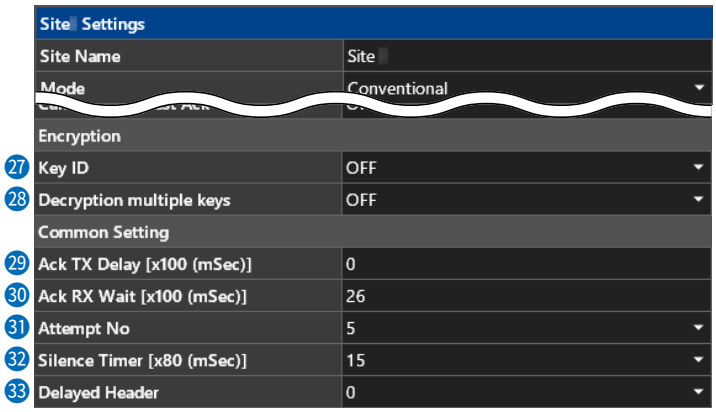
25 Call Alert RX ..... Select whether to receive Call Alert calls. (Default: OFF)

26 Call Alert Request Ack ..... Select whether to send an acknowledgment request to the target station when receiving a Call Alert call. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Encryption

27 Key ID ..... Select an Encryption Key ID from the list. Select “OFF” to disable the Encryption function.

ⓘ Before you select a key ID, you must set the Encryption Key List for the Site on the “Encryption” screen. (p.2-20)

The Voice Encryption function makes the communication between the caller and the called stations private by using an Encryption Key and Key ID. The same Encryption Key and Key ID must be set in all stations to communicate. (Default: OFF)

28 Decryption multiple keys… Select whether to decrypt multiple encryption keys on one channel. (Default: OFF)

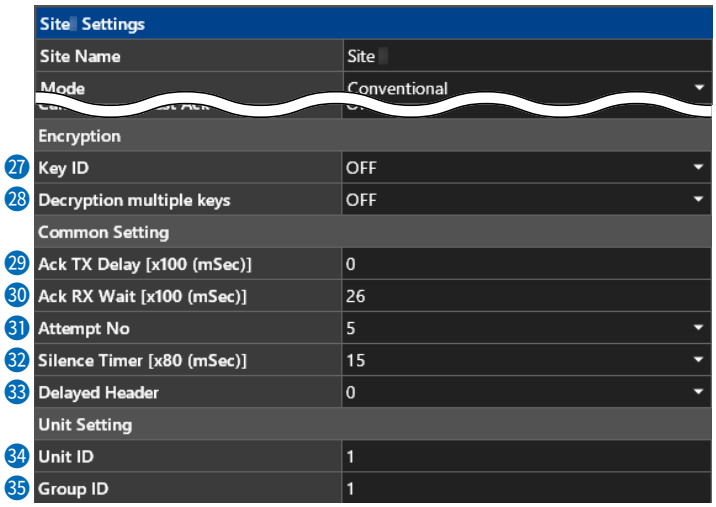
Options:

- OFF: Decrypts only one encryption key that is set in the Encryption Key List No.
- ON: Decrypts multiple encryption keys that are set in High Level Encryption (AES) or Low Level Encryption (DES), according to the Encryption Mode setting.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Common Setting

29 Ack TX Delay [x100 (mSec)]

Set the time in seconds to delay sending an Acknowledgment signal after receiving a Status, Message, Call Alert, Radio Check, Stun, Kill, Revive, or Remote Monitor call. (Default: 0)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

30 Ack RX Wait [x100 (mSec)]

Set the Ack RX Wait timer period.
The RC-FS20 waits for the set time period after transmitting a call that requires an acknowledgment.
If no acknowledgment is received within the period, the RC-FS20 will retry the call according to the Attempt No setting. (Default: 26)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

31 Attempt No .....

Set the maximum number of times the RC-FS20 transmits a call.
If no acknowledgment is received during the Ack RX Wait timer period, the RC-FS20 attempts to make the call for up to the set number of times. (Default: 5)
Range: 1 ~ 15

32 Silence Timer [x80 (mSec)]

Set the amount of time lapse of an IDAS frame before a failure is declared. (Default: 15)
Range: 5 ~ 255 (×80 milliseconds in 80 millisecond steps)

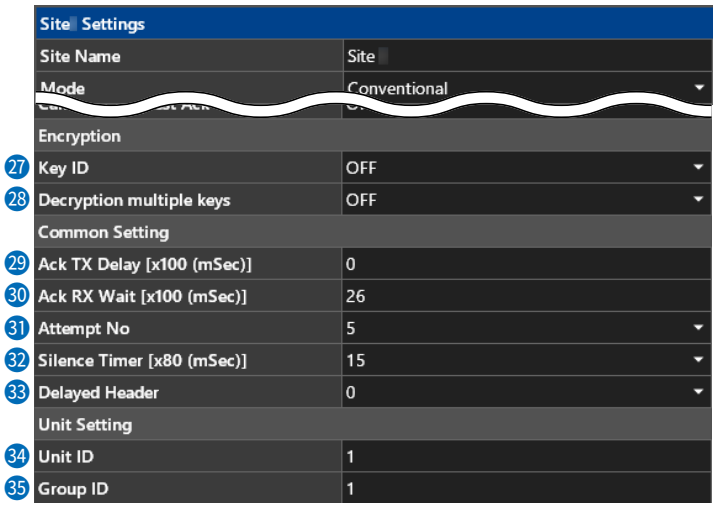
33 Delayed Header .....

Set the number of dummy frames.
When starting a transmission, the RC-FS20 adds some dummy frames to the head of the data in case the target station is in the power save mode, or is scanning. (Default: 0)
Range: 0 ~ 15

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Unit Setting

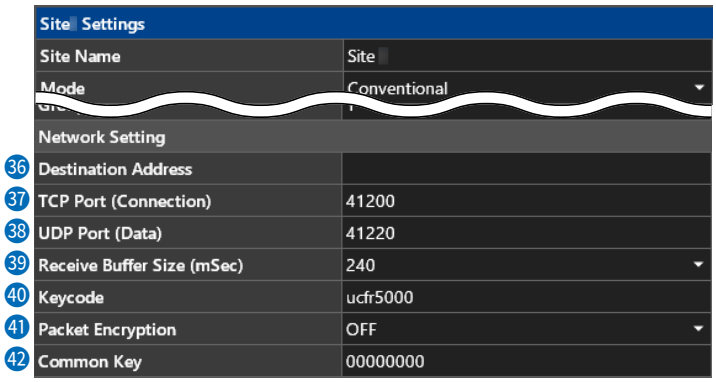
34 Unit ID ..... Enter the Unit ID of the RC-FS20 in the Site. (Default: 1)
Range: 1 ~ 65519

35 Group ID ..... Enter the Group ID of the RC-FS20 in the Site. (Default: 1)
Range: 1 ~ 65519

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



Network Setting

36 Destination Address ..... Enter the IP address or the domain name of the repeater in the Site. If no address or an invalid address is entered, the RC-FS20 cannot access the repeater.
Usable characters: A to Z, a to z, 0 to 9, -, and.

37 TCP Port (Connection) ..... Set the TCP port number of the repeater to access.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41200), Site No. 2 (41201), Site No. 3 (41202), Site No. 4 (41203), ..., Site No. 8 (41207)
Range: 1024 ~ 65535

38 UDP Port (Data) ..... Set the UDP port number of the repeater to access.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41220), Site No. 2 (41221), Site No. 3 (41222), Site No. 4 (41223), ..., Site No. 8 (41227)
Range: 1024 ~ 65535

39 Receive Buffer Size (mSec) Set the buffer size to prevent the audio from breaking up. (Default: 240)
Range: 80 ~ 1200 (milliseconds in the 80 millisecond steps)

40 Keycode ..... Set a key code of up to 16 characters to connect to the repeater's network/controller board. (Default: ucfr5000)
Usable characters: A to Z, a to z, 0 to 9,
!\"#$%&/*'()-+.,?_<>@`=~^|{}[];:

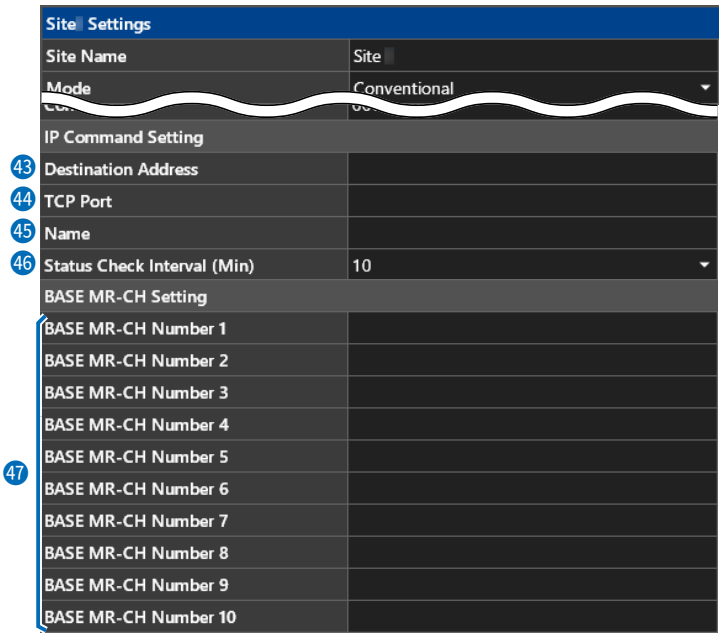
41 Packet Encryption ..... Select whether to enable the RC-FS20 to encrypt packets. (Default: OFF)

42 Common Key ..... Set an 8 digit common key to encrypt the packets. (Default: 00000000)

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Conventional mode)



IP Command Setting

43 Destination Address ..... Enter the IP address or the domain name of the repeater for an IP Command connection.
Usable characters: A to Z, a to z, 0 to 9, -, and.

44 TCP Port ..... Set the repeater's IP Command connection port number.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
Range: 1024 ~ 65535

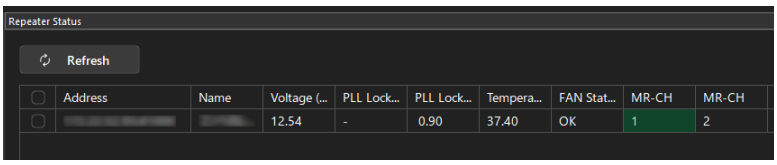
45 Name ..... Enter a repeater name of up to 12 characters for the Status Check.

46 Status Check Interval (Min) Set the time period for the repeater's Status Check interval.
The RC-FS20 receives Repeater Status information (Power supply voltage, PLL Lock voltage, Temperature, and Fan status) in this interval.
Range: 0 ~ 60 (minutes in the 10 minute steps) (Default: 10)

BASE MR-CH Setting

47 BASE MR-CH Number 1 ~ 10 Set the Memory channel of the repeater specified in the IP Command Setting.
Range: 1 ~ 1000

ⓘ The activated Memory channel is displayed in green on the Repeater Status screen. You can change the Memory channel by double-clicking the cell.

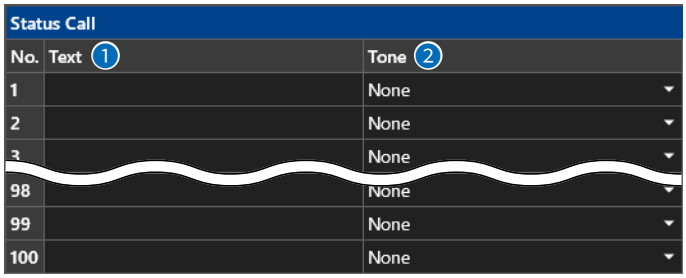


Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Status Call

■ Status Call (in the Conventional mode)

Configure the settings for the Status call operation.
The Status Call list can save up to 100 status messages.



1 Text ..... Enter a message of up to 12 characters to display when a Status call is received.

2 Tone ..... Select the tone type that sounds when a Status call is received.
(Default: None)

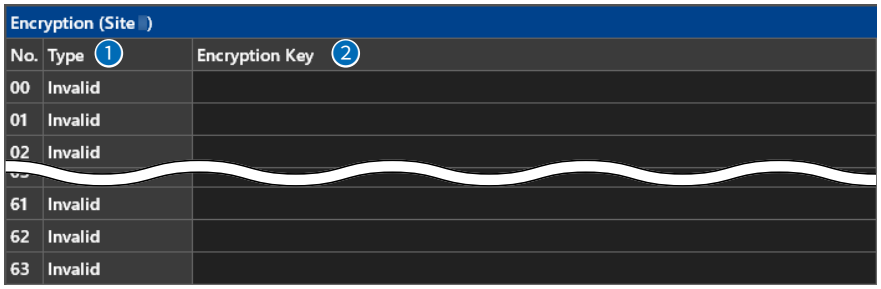
Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Encryption

■ Encryption (in the Conventional mode)

Configure the Encryption settings.
Up to 63 Encryption Keys can be stored.



❶ Type ..... Displays the Encryption type that is automatically set to “Invalid,” “Scrambler,” “DES,” or “AES,” depending on the length of the Encryption Key. (Default: Invalid)

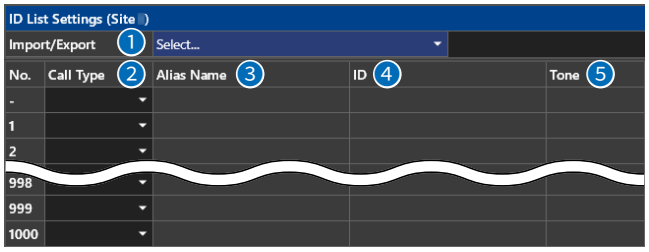
❷ Encryption Key ..... Set an Encryption Key of up to 64 characters.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the Conventional mode)

Configure the ID List settings.
The ID List can save up to 1000 IDs.



❶ Import/Export .....

Select “Import” or “Export” to import or export a CSV format file for the ID List.
Options:
- Import: Imports a maximum of 1000 NXDN Individual and Group IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported. Select a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 NXDN Individual and Group IDs. Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type .....

Select the call type from All, Individual, or Group.
ⓘ “All” is selectable for only the number “–.”
Only “Individual” or “Group” is selectable for the numbers 1 ~ 1000.

❸ Alias Name .....

Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List Settings.

❹ ID .....

Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Conventional operation.
Range: 1 ~ 65519

❺ Tone .....

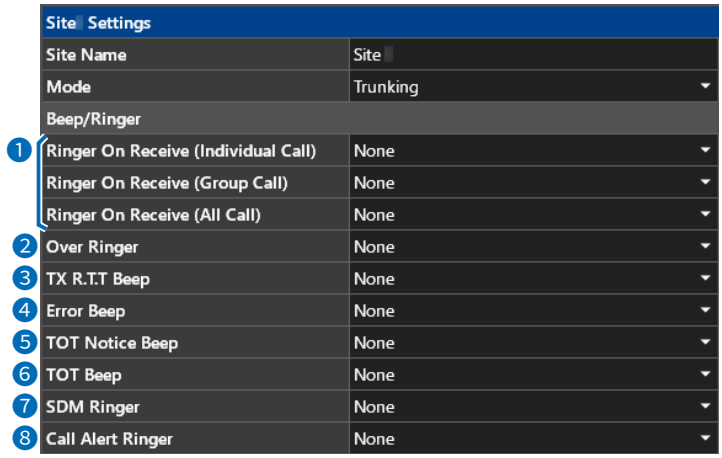
Settable only when the Call Type is set to “Individual” or “Group.”
Select the tone type that sounds when a Status, Message, or Call Alert call is received. (Default: Default)
Options:
- Default: The ringtone that is set in Ringer On Receive sounds. (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-7)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)

In the Trunking mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

1 Ringer On Receive (Individual Call, Group Call, All Call) ..... Rings when an Individual, Group, or All call is received. (Default: None)

2 Over Ringer ..... Rings when a call reception finishes. (Default: None)

3 TX R.T.T Beep ..... Rings when the transceiver is ready to transmit a voice signal to avoid cutting off the beginning part of the signal. (Default: None)

4 Error Beep ..... Rings when an error occurs, such as a transmission failure. (Default: None)

5 TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

6 TOT Beep ..... Rings when a transmission exceeds the set time period by the TOT, forcibly stops the transmission and a beep sounds. (Default: None)

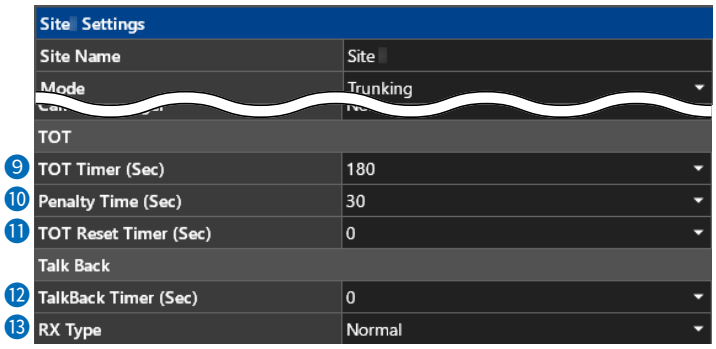
7 SDM Ringer ..... Rings when a Message is received. (Default: None)

8 Call Alert Ringer ..... Rings when a Call Alert call is received. (Default: None)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



TOT

⑨ TOT Timer (Sec) ..... Set the Time-out Timer (TOT).
If a continuous transmission exceeds the set time period, the transmission will be forcibly stopped. (Default: 180)
Range: 0 ~ 255 (seconds)

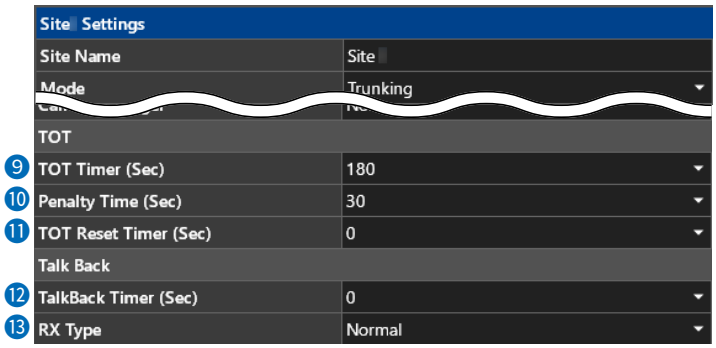
⑩ Penalty Time (Sec) ..... Set the TOT Penalty time.
After the TOT expires, the Penalty Time starts and inhibits the user from transmitting for the set time period. (Default: 30)
Range: 0 ~ 255 (seconds)

⑪ TOT Reset Timer (Sec) ..... Set the TOT Reset Timer time.
When releasing [PTT] before the TOT expires, the TOT Reset Timer starts. The TOT Timer will reset itself if the user does not push [PTT] again for the set time period. (Default: 0)
Range: 0 ~ 15 (seconds)

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Talk Back

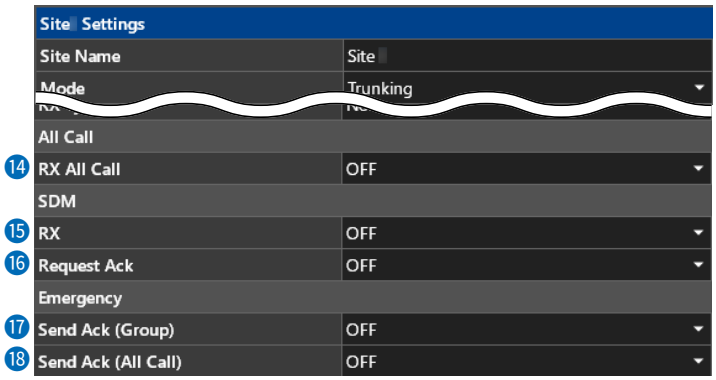
⑫ TalkBack Timer (Sec) …… The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period.
To disable the TalkBack function, set this item to "0." (Default: 0)
Range: 0 (disabled) ~ 255 (seconds)

⑬ RX Type …… Select an option for the TalkBack function if the received call is a digital signal. (Default: Normal)
Options:
- Normal: The TalkBack function will be activated when a voice, Status, Message, or Call Alert call is received.
- Voice Only: The TalkBack function will be activated only when a voice call is received.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



All Call

⑭ RX All Call ..... Select whether to receive All calls on the RC-FS20. “OFF” does not receive All calls. (Default: OFF)

SDM

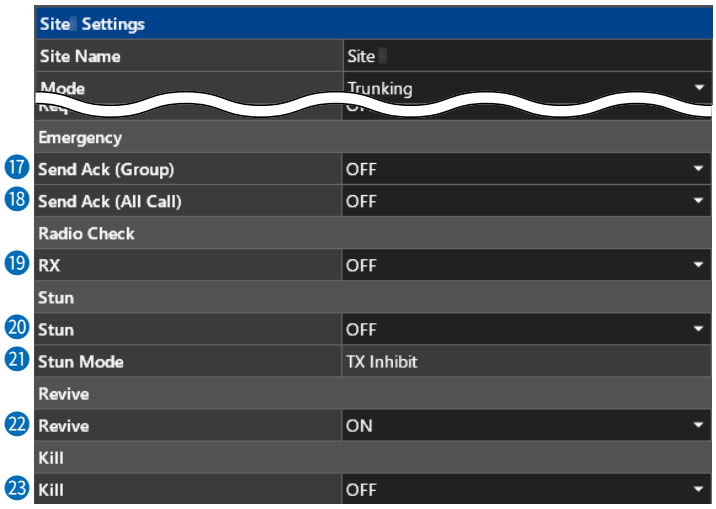
⑮ RX ..... Select whether to receive Messages on Individual, Group, and All calls. “OFF” does not receive Messages. (Default: OFF)

⑯ Request Ack ..... Select whether to request a status acknowledgment from the target station. The Request Ack is not available for Group calls. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Emergency

⑰ Send Ack (Group) ..... Select whether to send an acknowledgment when an Emergency call is received for a Group call. (Default: OFF)

⑱ Send Ack (All Call)..... Select whether to send an acknowledgment when an Emergency call is received for an All call. (Default: OFF)

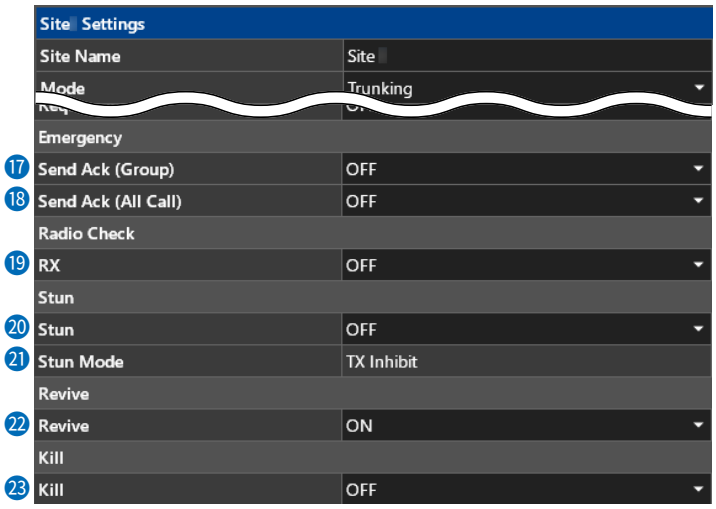
Radio Check

⑲ RX ..... Select whether to receive Radio Check calls.
A Radio Check call can determine whether a target station is within communication range and on channel, without requiring any operation by the target station user. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Stun

20 Stun ..... Select whether to transmit Stun commands. A Stun command remotely disables the transceiver. Transmitting a Revive command to a stunned transceiver is necessary to operate the stunned transceiver again. (Default: OFF)

21 Stun Mode ..... Select the capabilities of the stunned transceiver. (Default: TX Inhibit)
Options:
- TX Inhibit: Inhibits the stunned transceiver from transmitting.
- TX&RX Inhibit: Inhibits the stunned transceiver from transmitting and receiving.

Revive

22 Revive ..... Select whether to transmit Revive commands.
Transmitting a Revive command restores a stunned transceiver to normal operation. (Default: ON)

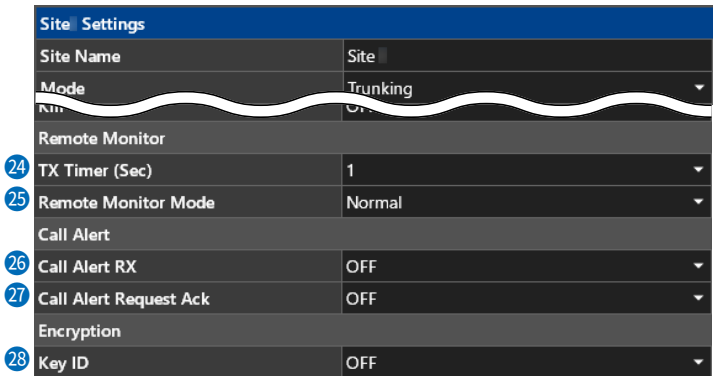
Kill

23 Kill ..... Select whether to transmit Kill commands.
A Kill command remotely disables the transceiver. The killed transceiver must be reprogrammed to operate the transceiver again. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Remote Monitor

24 TX Timer (Sec) ..... Set the time period so that the target transceiver transmits its microphone audio after receiving a Remote Monitor call. (Default: 1)
Range: 1 ~ 255 (seconds)

25 Remote Monitor Mode ..... Select the status of the target transceiver's indicator while transmitting its microphone audio after receiving a Remote Monitor call. (Default: Normal)

Options:
- Normal: The receiving transceiver's Status indicator lights while transmitting.
- Silent: The receiving transceiver's Status indicator does not light while transmitting.

Call Alert

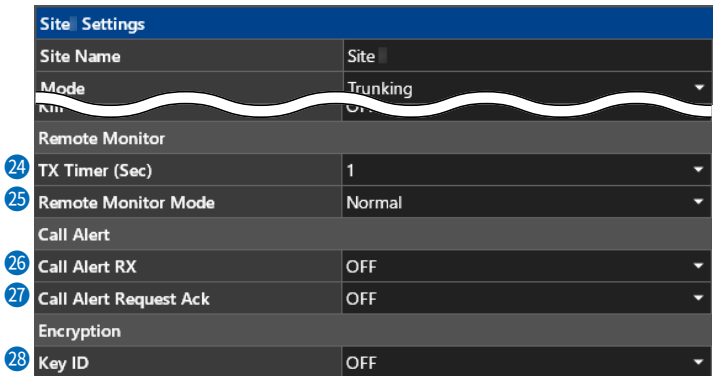
26 Call Alert RX ..... Select whether to receive Call Alert calls. (Default: OFF)

27 Call Alert Request Ack ..... Select whether to send an acknowledgment request to the target station when receiving a Call Alert call. (Default: OFF)

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Encryption

28 Key ID ..... Select an Encryption Key ID from the list. Select “OFF” to disable the Encryption function.

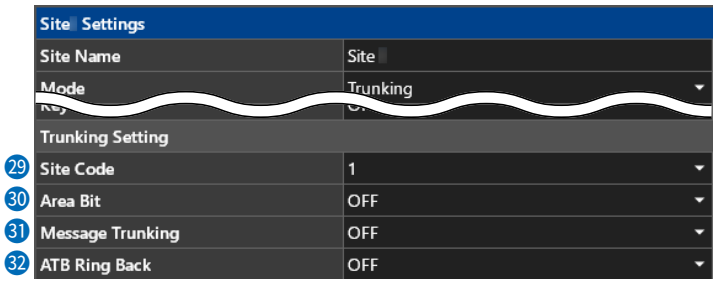
ⓘ Before you select a key ID, you must set the Encryption Key List for the Site on the “Encryption” screen. (p.2-38)

The Voice Encryption function makes the communication between the caller and the called stations private by using an Encryption Key and Key ID. The same Encryption Key and Key ID must be set in all stations to communicate. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Trunking Settings

29 Site Code ..... Select a site code to identify the Site. (Default: 1)
Range: 1 ~ 250

30 Area Bit..... Select whether to use Area Bit to prevent interference from adjacent systems.
When an adjacent trunking repeater operates on the same frequency, select “ON” to prevent interference. (Default: OFF)

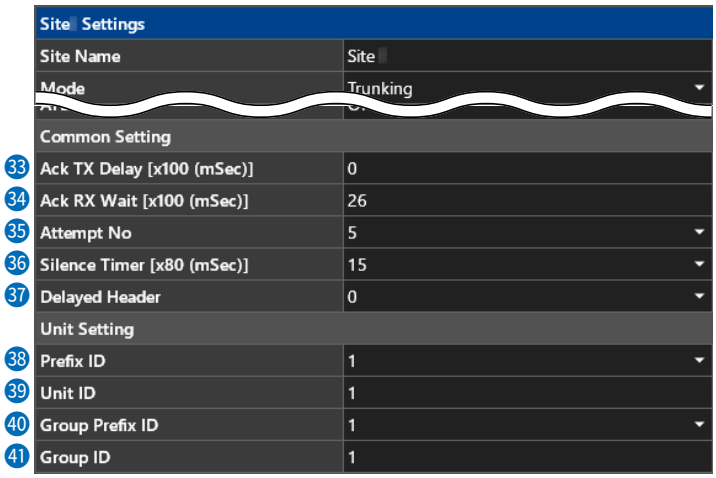
31 Message Trunking ..... Select whether to keep a trunk connection between the RC-FS20 and a repeater when a transmission finishes.
Select “ON” to keep the connection. (Default: OFF)

32 ATB Ring Back ..... Select whether to use the All Trunk Busy (ATB) Ring Back function.
No answer is given from a repeater when all repeaters in the Site are busy. However, when this function is set to “ON”, clicking <PTT> starts a search and continues until a free repeater becomes available. Then the RC-FS20 transmits immediately after a free repeater is found.
(Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Common Setting

33 Ack TX Delay [x100 (mSec)]

Set the time in seconds to delay sending an Acknowledgment signal after receiving a Status, Message, Call Alert, Radio Check, Stun, Kill, Revive or Remote Monitor call. (Default: 0)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

34 Ack RX Wait [x100 (mSec)]

Set the Ack RX Wait timer period.
The RC-FS20 waits for the set time period after transmitting a call that requires an acknowledgment.
If no acknowledgment is received within the period, the RC-FS20 will retry the call according to the Attempt No setting. (Default: 26)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

35 Attempt No .....

Set the maximum number of times the RC-FS20 transmits a call.
If no acknowledgment is received during the Ack RX Wait timer period, the RC-FS20 attempts to make the call for up to the set number of times. (Default: 5)
Range: 1 ~ 15

36 Silence Timer [x80 (mSec)]

Set the amount of time lapse of an IDAS frame before a failure is declared. (Default: 15)
Range: 5 ~ 255 (×80 milliseconds in 80 millisecond steps)

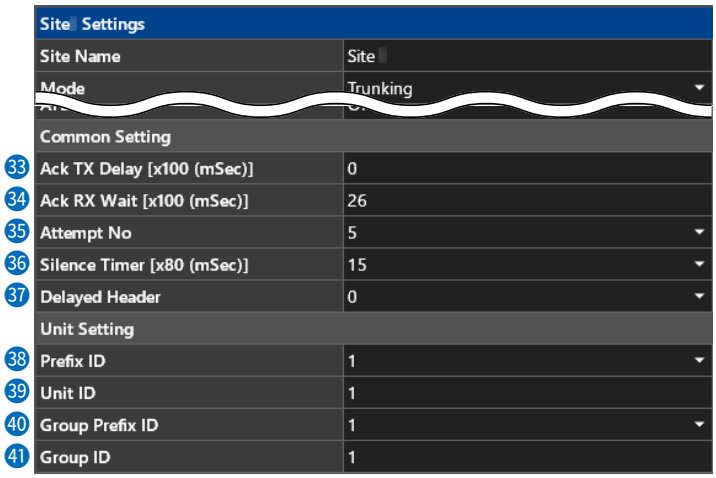
37 Delayed Header .....

Set the number of dummy frames. (Default: 0)
When starting a transmission, the RC-FS20 adds dummy frames at the beginning of the data in case the target station is in the Power-Saving mode or scanning.
Range: 0 ~ 15

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Unit Setting

38 Prefix ID ..... Enter the Prefix ID for the RC-FS20's Unit ID in the Site. (Default: 1)
Range: 1 ~ 30

39 Unit ID ..... Enter the Unit ID of the RC-FS20 in the Site. (Default: 1)
Range: 1 ~ 2000

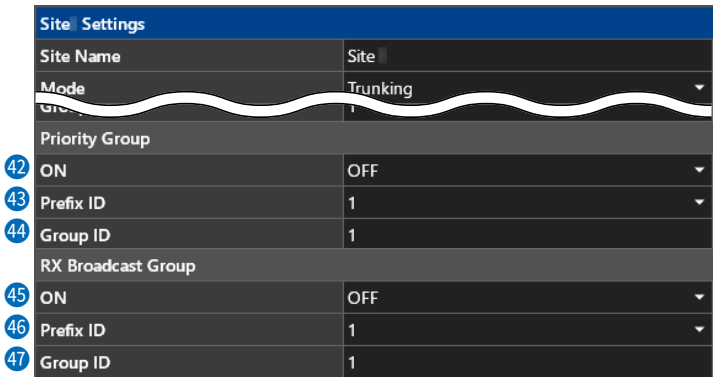
40 Group Prefix ID ..... Enter the Prefix ID for the RC-FS20's Group ID in the Site.
Range: 1 ~ 30 (Default: 1)

41 Group ID ..... Enter the Group ID of the RC-FS20 in the Site. (Default: 1)
Range: 1 ~ 2000

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Priority Group

42 ON ..... Select whether to use the Priority Group function.
This function enables the RC-FS20 to receive a call that includes the specified ID. (Default: OFF)

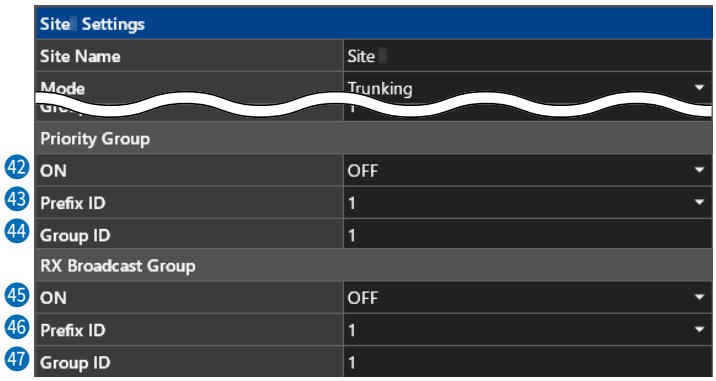
43 Prefix ID ..... Select the Prefix ID. (Default: 1)
Range: 1 ~ 30

44 Group ID ..... Enter the Group ID. (Default: 1)
Range: 1 ~ 2000

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



RX Broadcast Group

45 ON ..... Select whether to use the RX Broadcast Group function. This function enables the RC-FS20 to receive calls from the specified Groups, even if it does not belong to them. However, the RC-FS20 cannot transmit to the group. (Default: OFF)

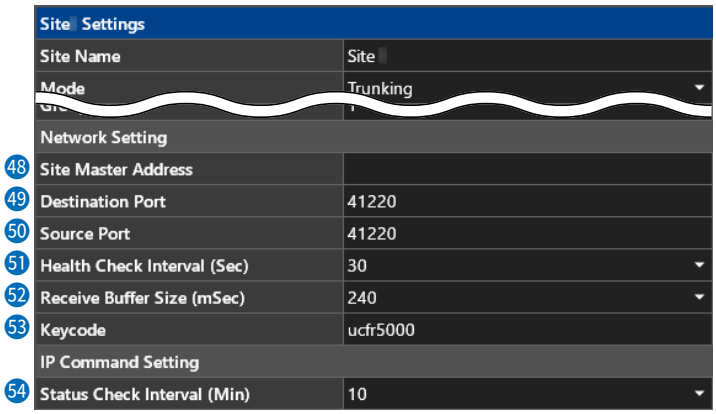
46 Prefix ID ..... Enter the Prefix ID. (Default: 1)
Range: 1 ~ 30

47 Group ID ..... Enter the Group ID. (Default: 1)
Range: 1 ~ 2000

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Network Setting

48 Site Master Address ..... Enter the IP address or the domain name of the system master or the Site master repeater that the RC-FS20 accesses.
If no address or an invalid address is set, the RC-FS20 cannot access the repeater.
Usable characters: A to Z, a to z, 0 to 9, -, and.

49 Destination Port ..... Set the port number of the Site master repeater that the RC-FS20 accesses.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41220), Site No. 2 (41221), Site No. 3 (41222), Site No. 4 (41223), ..., Site No. 8 (41227)
Range: 10000 ~ 65535

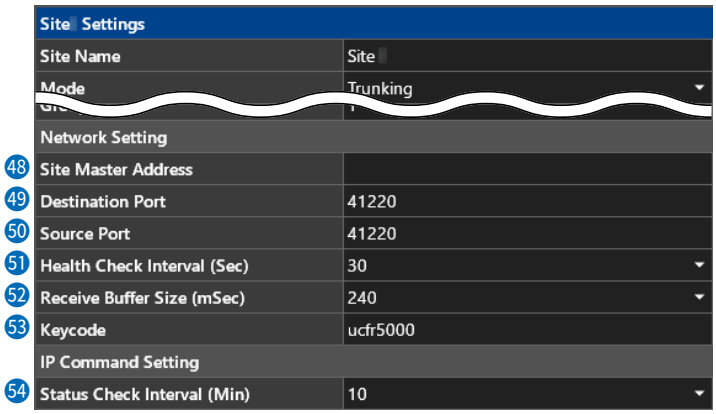
50 Source Port ..... Set the port number of the RC-FS20 that accesses the Site master repeater.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41220), Site No. 2 (41221), Site No. 3 (41222), Site No. 4 (41223), ..., Site No. 8 (41227)
Range: 10000 ~ 65535

51 Health Check Interval (Sec) Set the online watch interval for the RC-FS20 and a site master repeater.
The RC-FS20 sends a Health Check packet at startup, and then at this time interval. (Default: 30)
Range: 10 ~ 60 (seconds in the 10 second steps)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the Trunking mode)



Network Setting

52 Receive Buffer Size (mSec) Set the buffer size to prevent the audio from breaking up. (Default: 240)
Range: 80 ~ 1200 (milliseconds in the 80 millisecond steps)

53 Keycode ..... Set a key code of up to 16 characters to connect to the repeater's network/controller board. (Default: ucfr5000)

IP Command Setting

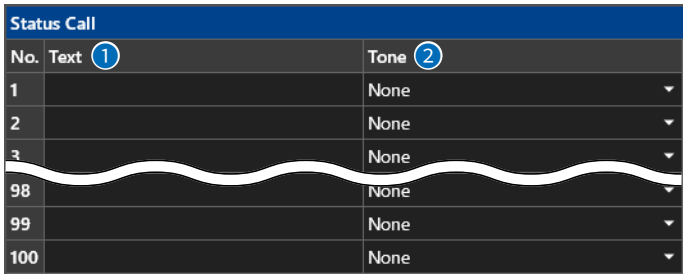
54 Status Check Interval (Min) Select the interval time to check the connection status. (Default: 10)
Range: 0 ~ 60 (minutes in the 10 minute steps)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Status Call

■ Status Call (in the Trunking mode)

Configure the settings for the Status call operation.
The Status Call list can save up to 34 status messages.



1 Text ..... Enter a message of up to 12 characters to display when a Status call is received.

2 Tone ..... Select the tone type that sounds when a Status call is received.
(Default: None)

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Encryption

■ Encryption (in the Trunking mode)

Configure the Encryption settings.



❶Type ..... Displays the Encryption type that is automatically set to “Invalid” or “Scrambler,” depending on the length of the Encryption Key.
(Default: Invalid)

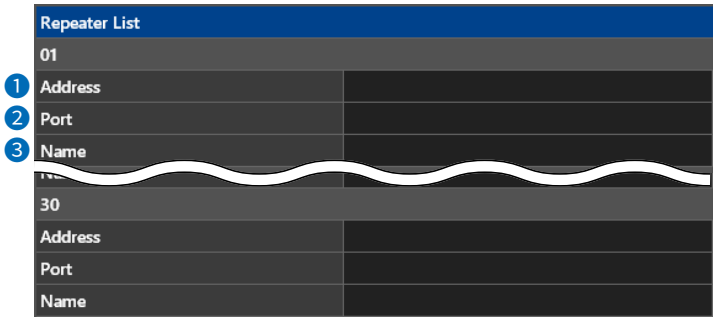
❷Encryption Key ..... Enter an Encryption Key of up to 5 characters.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Repeater List

■ Repeater List (in the Trunking mode)

Configure the Repeater List settings for the Status Check function.
The Repeater List can save up to 30 repeaters.



1 Address ..... Enter the IP address or the domain name of the repeater from which the RC-FS20 receives information for the Status Check function.

2 Port ..... Set the repeater's port number for the Status Check.
Range: 1024 ~ 65535

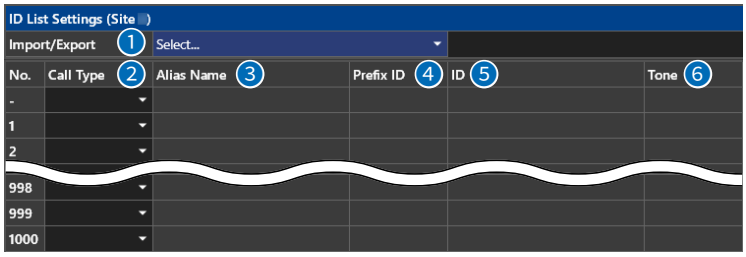
3 Name ..... Enter a repeater name of up to 12 characters for the Status Check.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the Trunking mode)

Configure the ID List settings.
The ID List can save up to 1000 IDs.



❶ Import/Export ..... Select “Import” or “Export” to import or export a CSV format file for the ID List.
Options:
- Import: Imports a maximum of 1000 NXDN Individual and Group IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported. Select a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 NXDN Individual and Group IDs. Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type ..... Select the call type from All, Individual, or Group.
ⓘ “All” is selectable for only the number “–.”
Only “Individual” or “Group” is selectable for the numbers 1 ~ 1000.

❸ Alias Name ..... Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List Settings.

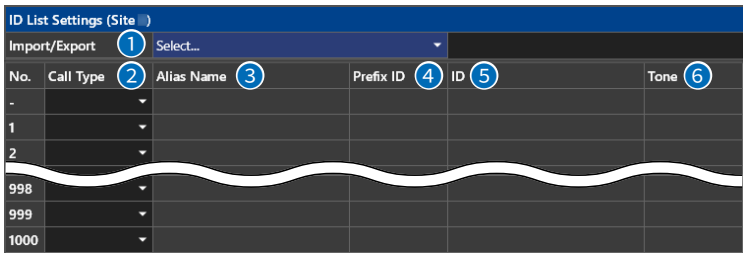
❹ Prefix ID ..... Settable only when the Call Type is set to “Individual” or “Group.”
Enter a Prefix ID for the Trunking operation.
Range: 1 ~ 30

❺ ID ..... Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Trunking operation.
Range: 1 ~ 2000

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the Trunking mode)



6 Tone .....

Settable only when the Call Type is set to “Individual” or “Group.”
Select the tone type that sounds when a Status, Message, or Call Alert call is received. (Default: Default)
Options:

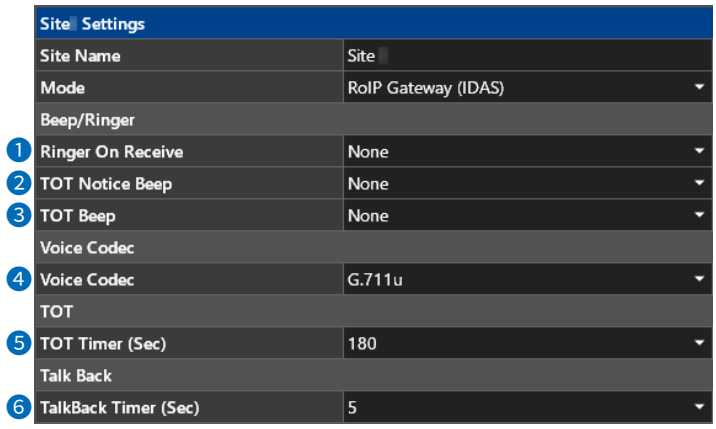
- Default: The ringtone that is set in Ringer On Receive sounds. (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-22)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (IDAS) mode)

In the RoIP Gateway (IDAS) mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

❶ Ringer On Receive ..... Rings when a call is received. (Default: None)

❷ TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

❸ TOT Beep ..... Rings when a transmission exceeds the set time period and is forcibly stopped by the TOT. (Default: None)

Voice Codec

❹ Voice Codec ..... Select the voicec codec from “G.711u” or “AMBE+2.” (Default: G.711u)
ⓘ When the Voice Codec is set to “G.711u,” you cannot register IDs on the ID List Settings screen. (2-46)
ⓘ An optional CT-24 DIGITAL VOICE CONVERTER is required to use AMBE+2.

TOT

❺ TOT Timer (Sec) ..... Set the Time-out Timer (TOT). If a continuous transmission exceeds the set time period, it will be forcibly stopped. (Default: 180)
Range: 0 ~ 255

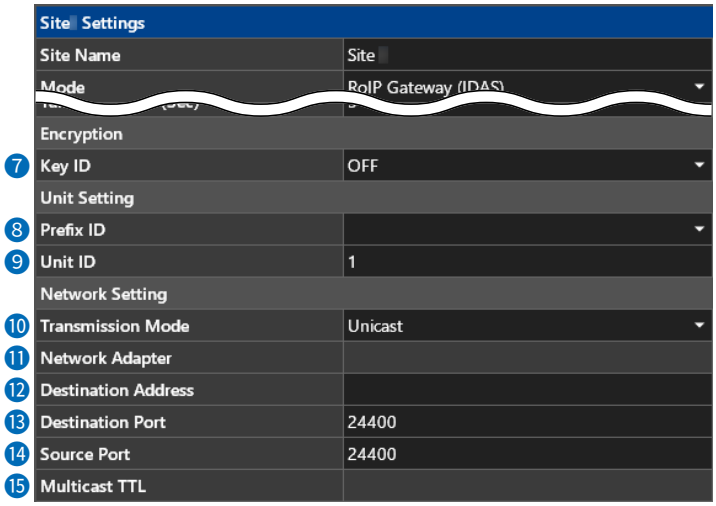
Talk Back

❻ TalkBack Timer (Sec) ..... The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period.
To disable the TalkBack function, set this item to “0.” (Default: 5)
Range: 0 (disabled) ~ 10

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (IDAS) mode)



Encryption

❼ Key ID ..... Select an Encryption Key ID from the list. Select “OFF” to disable the Encryption function.

ⓘ Before you select a key ID, you must set the Encryption Key List for the Site on the “Encryption” screen. (p.2-45)

The Voice Encryption function makes the communication between the caller and the called stations private by using an Encryption Key and Key ID. The same Encryption Key and Key ID must be set in all stations to communicate. (Default: OFF)

Unit Setting

❽ Prefix ID ..... Enter the Prefix ID for the RC-FS20’s Unit ID in the Site.

Range: 1 ~ 30

ⓘ If the Unit ID is greater than “65535,” this item cannot be set.

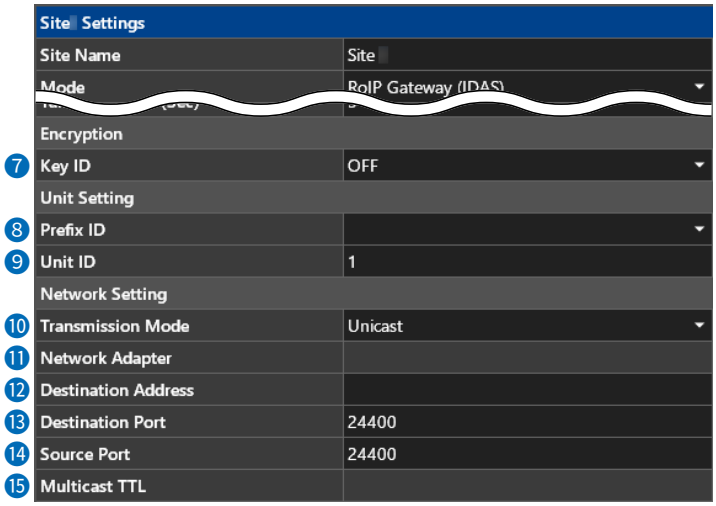
❾ Unit ID ..... Enter the Unit ID of the RC-FS20 in the Site. (Default: 1)

Range: 1 ~ 65535 (When the Prefix ID is set)
1 ~ 9999999 (When the Prefix ID is not set)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (IDAS) mode)



Network Setting

⑩ Transmission Mode ..... Select a transmission mode from “Unicast” or “Multicast.” (Default: Unicast)

Options:
- Unicast: Transmits calls to a single, specific destination IP address.
- Multicast: Transmits calls to a multicast group (multicast IP address) .

⑪ Network Adapter ..... Select a network adapter for multicast transmission.

⑫ Destination Address ..... Enter the destination device’s IP address or domain name.
Usable characters: A to Z, a to z, 0 to 9, -, and.

⑬ Destination Port ..... Enter the destination device’s service port number.
ⓘ Be sure to set a different port number for each destination device. The port number setting of the RC-FS20 and the destination device should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (24400), Site No. 2 (24402), Site No. 3 (24404), Site No. 4 (24406), ..., Site No. 8 (24414)
Range: 1024 ~ 65535

⑭ Source Port ..... Set the port number of the RC-FS20 that accesses the destination device.
ⓘ Be sure to set a different port number for each destination device. The port number setting of the RC-FS20 and the destination device should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (24400), Site No. 2 (24402), Site No. 3 (24404), Site No. 4 (24406), ..., Site No. 8 (24414)
Range: 1024 ~ 65535

⑮ Multicast TTL ..... Settable only when the Transmission Mode is set to “Multicast.”
Set the Multicast Time-To-Live (TTL) value. (Default: 1)
Range: 1 ~ 255

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Encryption

■ Encryption (in the RoIP Gateway (IDAS) mode)

Configure the Encryption settings.



❶Type ..... Displays the Encryption type that is automatically set to “Invalid” or “Scrambler,” depending on the length of the Encryption Key.
(Default: Invalid)

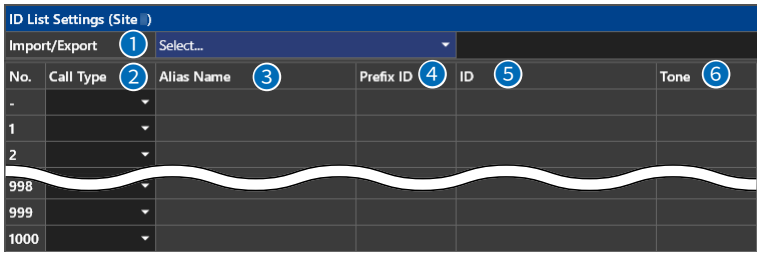
❷Encryption Key ..... Enter an Encryption Key of up to 5 characters.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the RoIP Gateway (IDAS) mode)

Configure the ID List settings.
The ID List cans save up to 1000 IDs.



❶ Import/Export ..... Select “Import” or “Export” to import or export a CSV format file for the ID List.
Options:
- Import: Imports a maximum of 1000 NXDN Individual and Group IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported. Select a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 NXDN Individual and Group IDs. Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type ..... Select the call type from All, Individual, or Group.
ⓘ “All” is selectable for only the number “–.”
Only “Individual” or “Group” is selectable for the numbers 1 ~ 1000.

❸ Alias Name ..... Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List Settings.

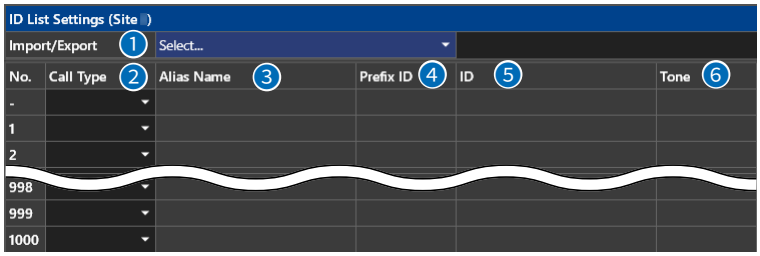
❹ Prefix ID ..... Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Conventional operation.
Range: 1 ~ 30

❺ ID ..... Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Conventional operation.
Range: 1 ~ 65535 (When the Prefix ID is set)
1 ~ 9999999 (When the Prefix ID is not set)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ ID List Settings (in the RoIP Gateway (IDAS) mode)



6 Tone .....

Settable only when the Call Type is set to “Individual” or “Group.”
Select the tone type that sounds when a Status, Message, or Call Alert call is received. (Default: Default)
Options:

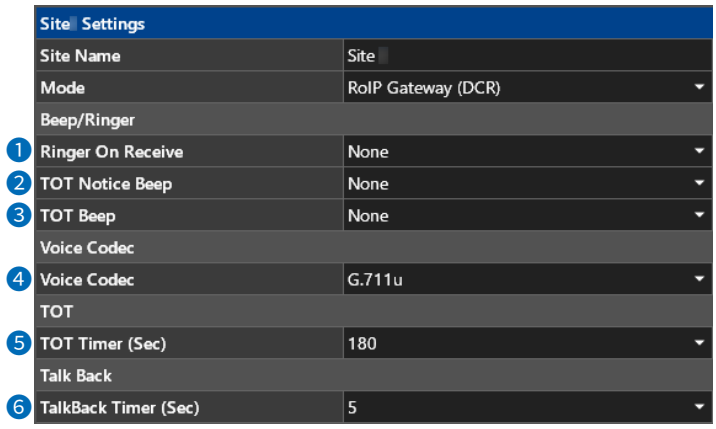
- Default: The ringtone that is set in Ringer On Receive sounds. (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-42)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (DCR) mode)

In the RoIP Gateway (DCR) mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

❶ Ringer On Receive ..... Rings when a call is received. (Default: None)

❷ TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

❸ TOT Beep ..... Rings when a transmission exceeds the set time period and is forcibly stopped by the TOT. (Default: None)

Voice Codec

❹ Voice Codec ..... Select the voicec codec from “G.711u” or “AMBE+2.” (Default: G.711u)

ⓘ When the Voice Codec is set to “G.711u,” you cannot register IDs on the ID List Settings screen. (2-52)

ⓘ An optional CT-24 DIGITAL VOICE CONVERTER is required to use AMBE+2.

TOT

❺ TOT Timer (Sec) ..... Set the Time-out Timer (TOT). If a continuous transmission exceeds the set time period, it will be forcibly stopped. (Default: 180)
Range: 0 ~ 255

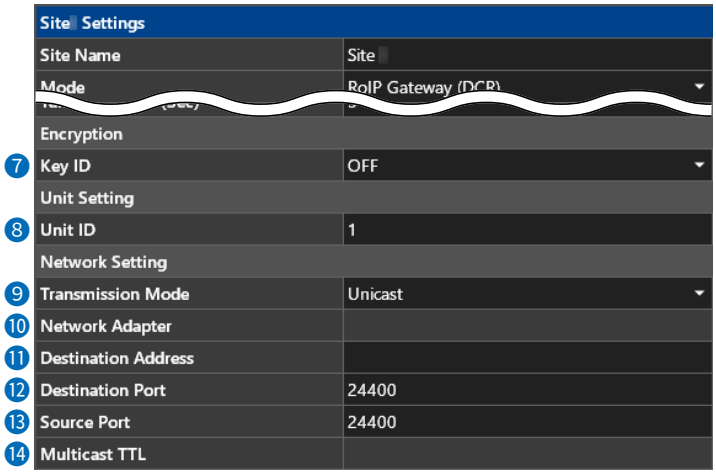
Talk Back

❻ TalkBack Timer (Sec) ..... The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period.
To disable the TalkBack function, set this item to “0.” (Default: 5)
Range: 0 (disabled) ~ 10

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (DCR) mode)



Encryption

7 Key ID ..... Select an Encryption Key ID from the list. Select “OFF” to disable the Encryption function.

ⓘ Before you select a key ID, you must set the Encryption Key List for the Site on the “Encryption” screen. (p.2-51)

The Voice Encryption function makes the communication between the caller and the called stations private by using an Encryption Key and Key ID. The same Encryption Key and Key ID must be set in all stations to communicate. (Default: OFF)

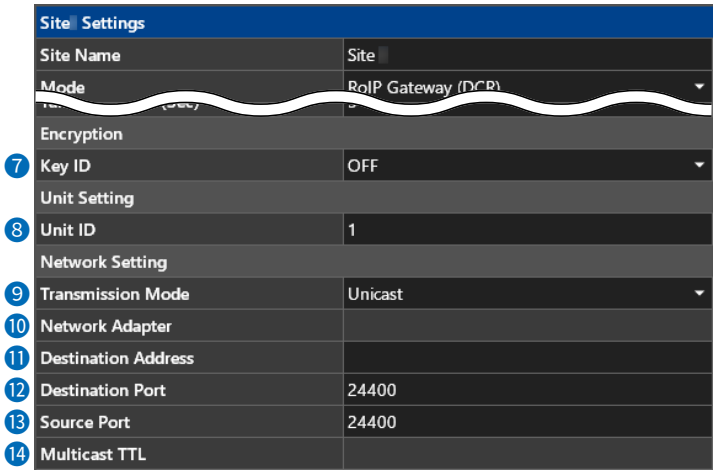
Unit Setting

8 Unit ID ..... Enter the Unit ID of the RC-FS20 in the Site. (Default: 1)
Range: 1 ~ 60000

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the RoIP Gateway (DCR) mode)



Network Setting

⑨ Transmission Mode ..... Select a transmission mode from “Unicast” or “Multicast.” (Default: Unicast)

Options:
- Unicast: Transmits calls to a single, specific destination IP address.
- Multicast: Transmits calls to a multicast group (multicast IP address) .

⑩ Network Adapter ..... Select a network adapter for multicast transmission.

⑪ Destination Address ..... Enter the destination device’s IP address or domain name.

⑫ Destination Port ..... Enter the destination device’s service port number.

ⓘ Be sure to set a different port number for each destination device. The port number setting of the RC-FS20 and the destination device should match.

ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (24400), Site No. 2 (24402), Site No. 3 (24404), Site No. 4 (24406), ..., Site No. 8 (24414)

Range: 1024 ~ 65535

⑬ Source Port ..... Set the port number of the RC-FS20 that accesses the destination device.

ⓘ Be sure to set a different port number for each destination device. The port number setting of the RC-FS20 and the destination device should match.

ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (24400), Site No. 2 (24402), Site No. 3 (24404), Site No. 4 (24406), ..., Site No. 8 (24414)

Range: 1024 ~ 65535

⑭ Multicast TTL ..... Settable only when the Transmission Mode is set to “Multicast.”
Set the Multicast Time-To-Live (TTL) value. (Default: 1)
Range: 1 ~ 255

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Encryption

■ Encryption (in the RoIP Gateway (DCR) mode)

Configure the Encryption settings.



❶Type ..... Displays the Encryption type that is automatically set to “Invalid” or “Scrambler,” depending on the length of the Encryption Key.
(Default: Invalid)

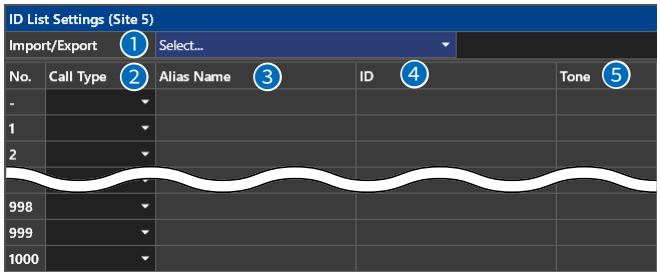
❷Encryption Key ..... Enter an Encryption Key of up to 5 characters.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the RoIP Gateway (DCR) mode)

Configure the ID List settings.
The ID List can save up to 100 IDs.



❶ Import/Export .....

Select “Import” or “Export” to import or export a CSV format file for the ID List.
Options:
- Import: Imports a maximum of 1000 NXDN Individual and Group IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported. Selects a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 NXDN Individual and Group IDs. Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type .....

Select the call type from All, Individual, or Group.
ⓘ “All” is selectable for only the number “–.”
Only “Individual” or “Group” is selectable for the numbers 1 ~ 1000.

❸ Alias Name .....

Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List Settings.

❹ ID .....

Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Conventional operation.
Range: 1 ~ 9999

❺ Tone .....

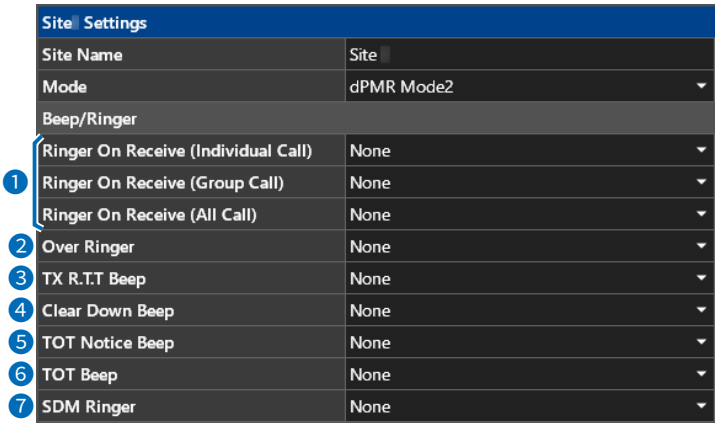
Settable only when the Call Type is set to “Individual” or “Group.”
Select the tone type that sounds when a Status, Message, or Call Alert call is received. (Default: Default)
Options:
- Default: The ringtone that is set in Ringer On Receive sounds. (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-48)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)

In the dPMR Mode2 mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

1 Ringer On Receive (Individual Call, Group Call, All Call) ..... Rings when an Individual, Group, or All call is received. (Default: None)

2 Over Ringer ..... Rings when a call reception finishes. (Default: None)

3 TX R.T.T Beep ..... Rings when the transceiver is ready to transmit a voice signal to avoid cutting off the beginning part of the signal. (Default: None)

4 Clear Down Beep ..... Rings when a Clear down signal is received. (Default: None)

5 TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

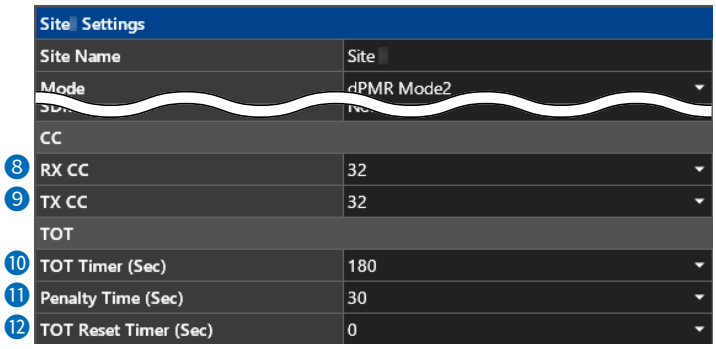
6 TOT Beep ..... Rings when a transmission exceeds the set time period and is forcibly stopped by the TOT. (Default: None)

7 SDM Ringer ..... Rings when a Message is received. (Default: None)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



CC

8 RX CC ..... Set the CC for receiving calls. (Default: 32)
Range: 0 ~ 63

9 TX CC ..... Set the CC for transmitting calls. (Default: 32)
Range: 0 ~ 63

TOT

10 TOT Timer (Sec) ..... Set the Time-out Timer (TOT).
If a continuous transmission exceeds the set time period, it will be forcibly stopped. (Default: 180)
Range: 0 ~ 255 (seconds)

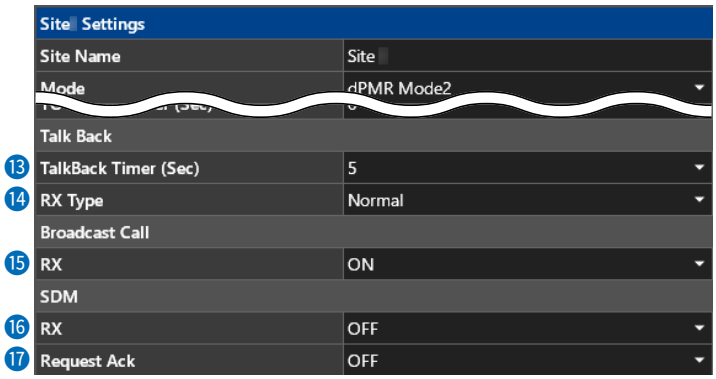
11 Penalty Time (Sec) ..... Set the TOT Penalty time.
After the TOT expires, the Penalty Time starts and inhibits the user from transmitting for the set time period. (Default: 30)
Range: 0 ~ 255 (seconds)

12 TOT Reset Timer (Sec) ..... Set the TOT Reset Timer time.
When releasing [PTT] before the TOT expires, the TOT Reset Timer starts. The TOT Timer will reset itself if the user does not push [PTT] again for the set time period. (Default: 0)
Range: 0 ~ 15 (seconds)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Talk Back

⓭ TalkBack Timer (Sec) ..... The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period. (Default: 5)
Range: 5 ~ 30 (seconds)

⓮ RX Type ..... Select an option for the TalkBack function if the received call is a digital signal. (Default: Normal)
Options:
- Normal: The TalkBack function will be activated when a voice, Status, Message, or Call Alert call is received.
- Voice Only: The TalkBack function will be activated only when a voice call is received.

Broadcast Call

⓯ RX ..... Select whether to receive Broadcast calls on the RC-FS20. When this item is set to “OFF,” the RC-FS20 will receive Broadcast calls as normal calls. (Default: ON)

SDM

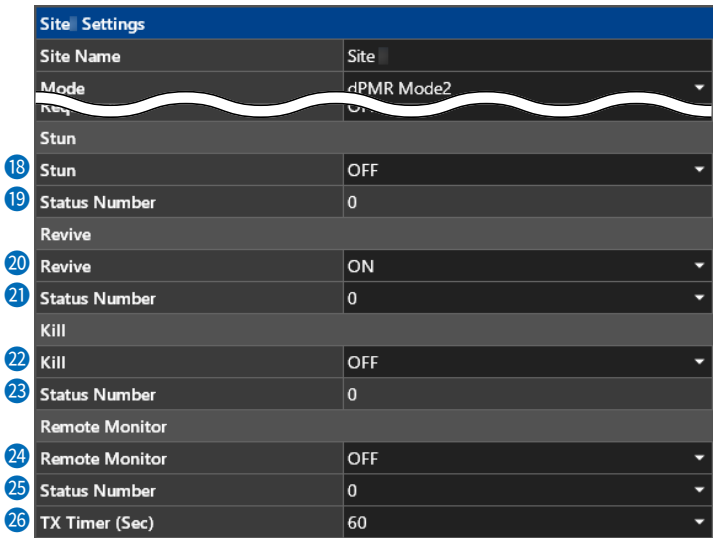
⓰ RX ..... Select whether to receive Messages on Individual, Group, and All calls. “OFF” does not receive Messages. (Default: OFF)

⓱ Request Ack ..... Select whether to request a status acknowledgment from the target station. The Request Ack is not available for Group calls. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Stun

⑱ Stun ..... Select whether to transmit Stun commands. A Stun command remotely disables the transceiver. Transmitting a Revive command to a stunned transceiver is necessary to operate the stunned transceiver again. (Default: OFF)

⑲ Status Number ..... Select a Status Number to send when transmitting a Stun command. (Default: 0)

Revive

⑳ Revive ..... Select whether to transmit Revive commands. Transmitting a Revive command restores a stunned transceiver to normal operation. (Default: ON)

㉑ Status Number ..... Select a Status Number to send when transmitting a Revive command. (Default: 0)

Kill

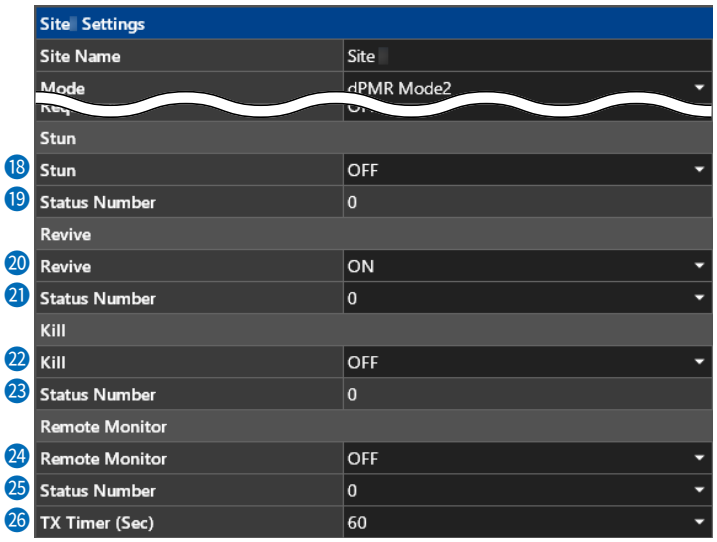
㉒ Kill ..... Select whether to transmit Kill commands. A Kill command remotely disables the transceiver. The killed transceiver must be reprogrammed to operate the transceiver again. (Default: OFF)

㉓ Status Number ..... Select a Status Number to send when transmitting a Kill command. (Default: 0)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Remote Monitor

24 Remote Monitor ..... Select whether to transmit Remote Monitor calls. Remote Monitor calls cause the target transceiver to transmit the audio from its microphone. (Default: OFF)

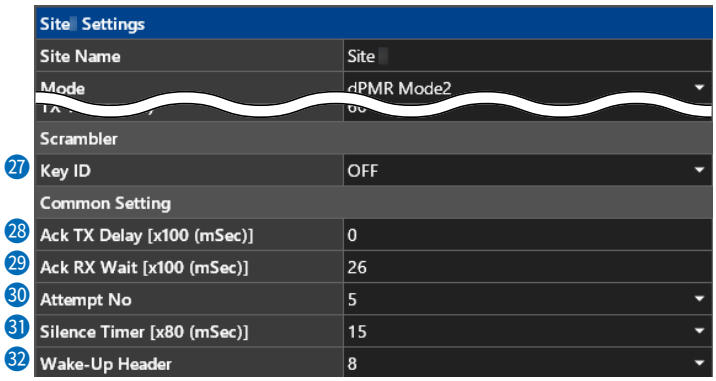
25 Status Number ..... Select a Status Number to send when transmitting a Remote Monitor call. (Default: 0)

26 TX Timer (Sec) ..... Set the time period so that the target transceiver transmits its microphone audio after receiving a Remote Monitor call. (Default: 60)
Range: 5 ~ 180 (seconds)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Scrambler

27 Key ID ..... Select a Scrambler Key ID from the list. Select “OFF” to disable the Scrambler function. (Default: OFF)

ⓘ Before you select a key ID, you must set the Scrambler Key List for the Site on the “Scrambler” screen. (p.2-63)

Common Setting

28 Ack TX Delay [x100 (mSec)] Set the time in seconds to delay sending an Acknowledgment signal after receiving a Status, Message, Call Alert, Radio Check, Stun, Kill, Revive, or Remote Monitor call. (Default: 0)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

29 Ack RX Wait [x100 (mSec)] Set the Ack RX Wait timer period.
The RC-FS20 waits for the set time period after transmitting a call that requires an acknowledgment.
If no acknowledgment is received within the period, the RC-FS20 will retry the call according to the Attempt No setting. (Default: 26)
Range: 0 ~ 600 (0 ~ 60 seconds in 100 millisecond steps)

30 Attempt No ..... Set the maximum number of times the RC-FS20 transmits a call.
If no acknowledgment is received during the Ack RX Wait timer period, the RC-FS20 attempts to make the call for up to the set number of times. (Default: 5)
Range: 1 ~ 15)

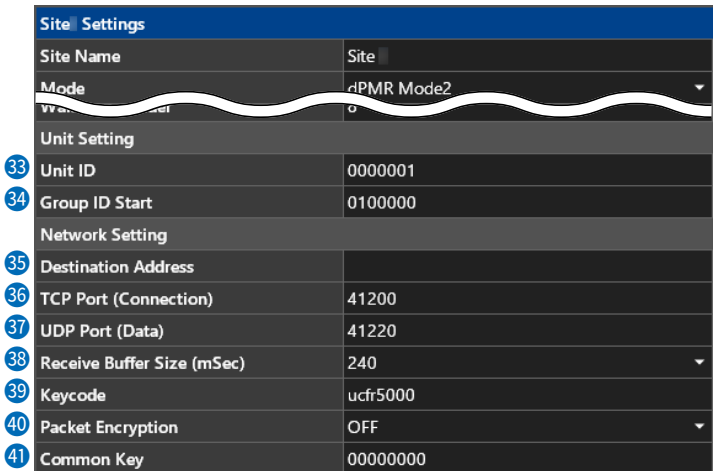
31 Silence Timer [x80 (mSec)] Set the amount of time lapse of an IDAS frame before a failure is declared. (Default: 15)
Range: 5 ~ 255 (×80 milliseconds in 80 millisecond steps)

32 Wake-Up Header ..... Set the number of dummy frames. (Default: 8)
Range: 0 ~ 15

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Unit Setting

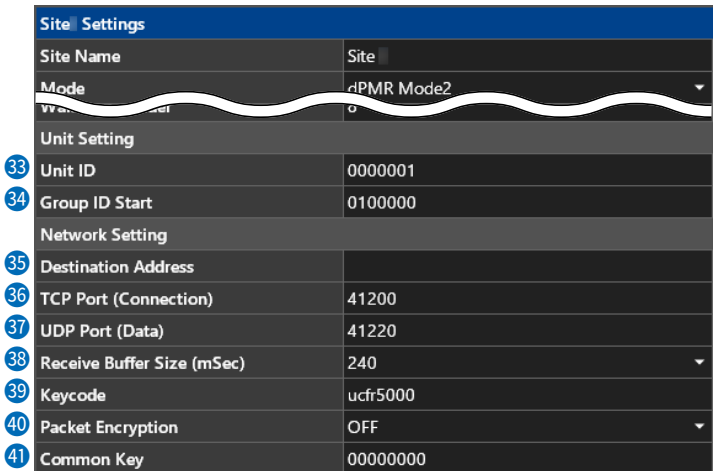
33 Unit ID ..... Enter the Unit ID of the RC-FS20 in the Site. (Default: 0000001)
Range: 0000001 ~ 9999998
ⓘ If this item is set to a value greater than the Group ID Start, the maximum value will be 1 less than the Group ID Start.

34 Group ID Start..... Enter the initial ID for the group IDs in the Site.
The RC-FS20 uses IDs starting from the Group ID start as group IDs.
Range: 0000002 ~ 9999999 (Default: 0100000)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



Network Setting

35 Destination Address ..... Enter the IP address or the domain name of the repeater in the Site. If no address or an invalid address is entered, the RC-FS20 cannot access the repeater.
Usable characters: A to Z, a to z, 0 to 9, -, and.

36 TCP Port (Connection) ..... Set the TCP port number of the repeater to access.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41200), Site No. 2 (41201), Site No. 3 (41202), Site No. 4 (41203), ..., Site No. 8 (41207)
Range: 1024 ~ 65535

37 UDP Port (Data) ..... Set the UDP port number of the repeater to access.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (41220), Site No. 2 (41221), Site No. 3 (41222), Site No. 4 (41223), ..., Site No. 8 (41227)
Range: 1024 ~ 65535

38 Receive Buffer Size (mSec) Set the buffer size to prevent the audio from breaking up. (Default: 240)
Range: 80 ~ 1200 (milliseconds in the 80 millisecond steps)

39 Keycode ..... Set a key code of up to 16 characters to connect to the repeater's network/controller board. (Default: ucfr5000)

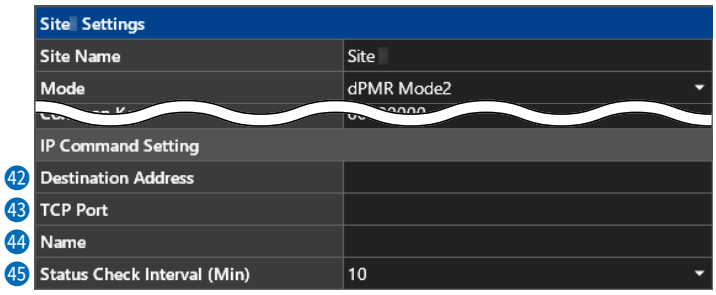
40 Packet Encryption ..... Select whether to enable the RC-FS20 to encrypt packets. (Default: OFF)

41 Common Key ..... Set an 8 digit common key to encrypt the packets. (Default: 00000000)

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 8

■ Site Settings (in the dPMR Mode2 mode)



IP Command Setting

42 Destination Address ..... Enter the IP address or the domain name of the repeater for an IP Command connection.
Usable characters: A to Z, a to z, 0 to 9, -, and.

43 TCP Port ..... Set the repeater's IP Command connection port number.
ⓘ Be sure to set a different port number for each repeater. The port number setting of the RC-FS20 and the repeater should match.
Range: 1024 ~ 65535

44 Name ..... Enter a repeater name of up to 12 characters for the Status Check.

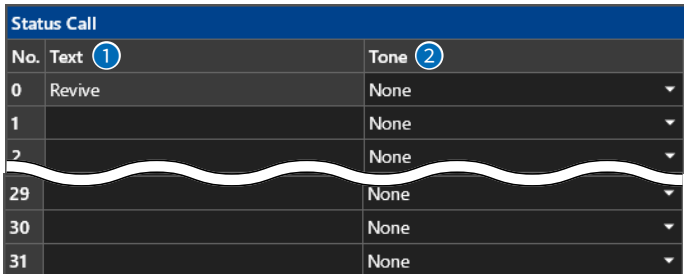
45 Status Check Interval (Min) Set the time period for the repeater's Status Check interval.
The RC-FS20 receives Repeater Status information (Power supply voltage, PLL Lock voltage, Temperature, and Fan status) in this interval.
Range: 0 ~ 60 (minutes in the 10 minute steps) (Default: 10)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Status Call

■ Status Call (in the dPMR Mode2 mode)

Configure the settings for the Status call operation.
The Status Call list can save up to 31 status messages.



1 Text ..... Enter a message of up to 12 characters to display when a Status call is received.

2 Tone ..... Select the tone type that sounds when a Status call is received.
(Default: None)

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > Scrambler

■ Scrambler (in the dPMR Mode2 mode)

Configure the Scrambler settings.



❶Type ..... Displays the Scrambler type that is automatically set to “Invalid” or “Scrambler,” depending on the length of the Scrambler Key.
(Default: Invalid)

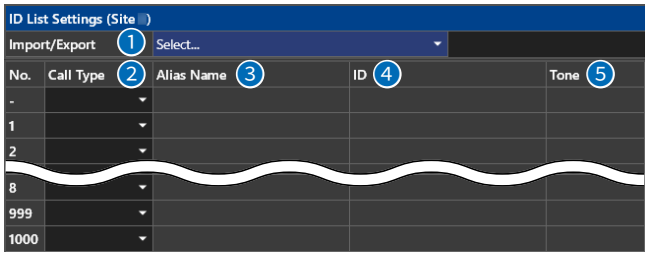
❷Scramble Key ..... Set a Scrambler Key of up to 5 characters.

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 8 > ID List

■ ID List Settings (in the dPMR Mode2 mode)

Configure the ID List settings.
The ID List can save up to 1000 IDs.



❶ Import/Export .....

Select “Import” or “Export” to import or export a CSV format file for the ID List.
Options:
- Import: Imports a maximum of 1000 NXDN Individual and Group IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported. Selects a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 NXDN Individual and Group IDs. Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type .....

Select the call type from All, Individual, or Group.
ⓘ “All” is selectable for only the number “–.”
Only “Individual” or “Group” is selectable for the numbers 1 ~ 1000.

❸ Alias Name .....

Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List Settings.

❹ ID .....

Settable only when the Call Type is set to “Individual” or “Group.”
Enter an ID for the Conventional operation.
Range: 0000001 ~ 9999999
ⓘ All digits except for the first 3 digits can be replaced with asterisks (*) as wildcards. As an exception, you can enter an ID consisting of a single digit followed by 6 asterisks.
ⓘ You cannot enter an ID consisting of a single digit followed by 6 zeros.

❺ Tone .....

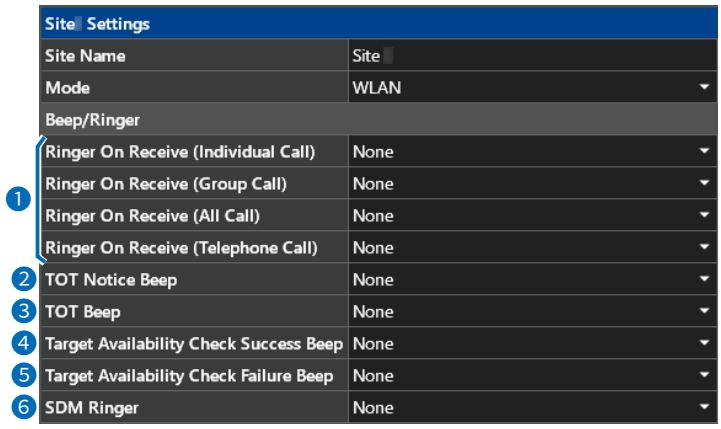
Settable only when the Call Type is set to “Individual” or “Group.”
Select the tone type that sounds when a Status, Message, or Call Alert call is received. (Default: Default)
Options:
- Default: The ringtone that is set in Ringer On Receive sounds. (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-7)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (in the WLAN mode)

In the WLAN mode site, the following setting items are displayed.



Beep/Ringer
Set the receiving ringtone for each Notification.

Options:
- None: No ringtone sounds.
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

1 Ringer On Receive (Individual Call, Group Call, All Call, Telephone Call) ..... Rings when an Individual, Group, All, or Telephone call is received. (Default: None)

2 TOT Notice Beep ..... Rings 10 seconds before the Time-out Timer (TOT) expires. (Default: None)

3 TOT Beep ..... Rings when a transmission exceeds the set time period and is forcibly stopped by the TOT. (Default: None)

4 Target Availability Check Success Beep ..... Rings when the connection to the target transceiver succeeds. (Default: None)

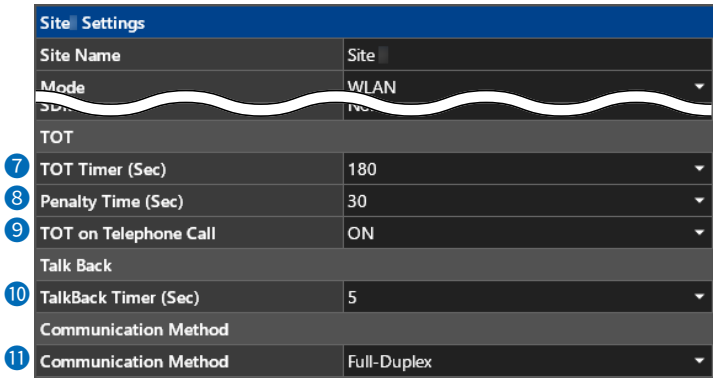
5 Target Availability Check Failure Beep ..... Rings when the connection to the target transceiver fails. (Default: None)

6 SDM Ringer ..... Rings when a Message is received. (Default: None)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (in the WLAN mode)



TOT

7 TOT Timer (Sec) ..... Set the Time-out Timer (TOT). If a continuous transmission exceeds the set time period, it will be forcibly stopped. (Default: 180)
Range: OFF, 11 ~ 600

8 Penalty Time (Sec) ..... Set the TOT Penalty time.
After the TOT expires, the Penalty Time starts and inhibits the user from transmitting for the set time period. (Default: 30)
Range: 1 ~ 30

9 TOT on Telephone Call..... Set the TOT function for the telephone call. Toggles between Enable and Inhibit. (Default: ON)

Talk Back

10 TalkBack Timer (Sec) ..... The TalkBack function enables the RC-FS20 to automatically set the same call type as the received call when [PTT] is pushed before or during the TalkBack timer period.
To disable the TalkBack function, set this item to “0.” (Default: 5)
Range: 0 (disabled) ~ 30

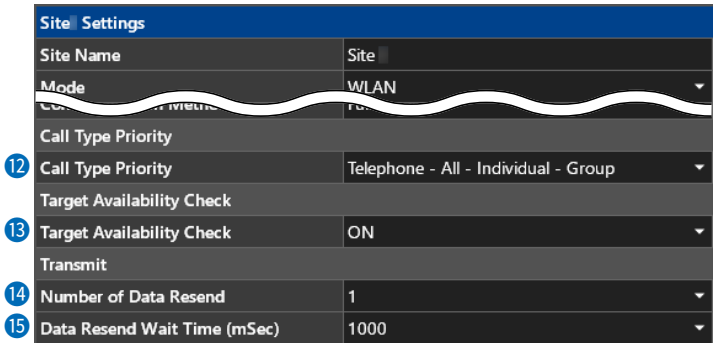
Communication Method

11 Communication Method ... Set the communication method between the Simplex and Full-Duplex modes. (Default: Full-Duplex)
Options:
- Simplex: Toggles the transmission (Talker) and reception (Listener) for communication.
- Full-Duplex: Simultaneously transmits and receives, like a telephone.

Site Settings

⚙ > Option > Setting > Site Settings > Site 1 ~ 32

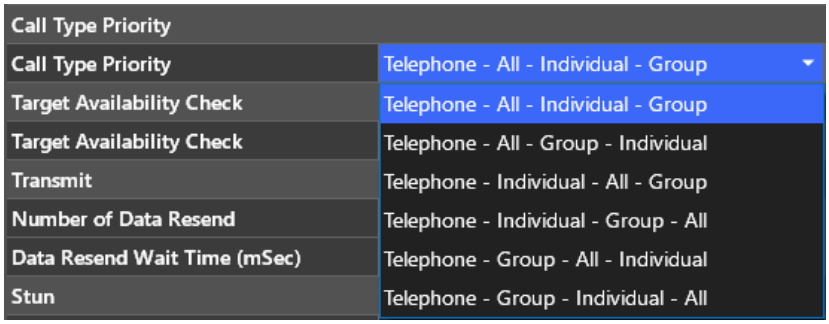
■ Site Settings (in the WLAN mode)



Call Type Priority

⓬ Call Type Priority ..... Select the priority levels of the Call types. After a call finishes and the transceiver returns to the standby mode, if it receives another call during the TalkBack timer, it accepts the call according to this priority setting. (Default: Telephone - All - Individual - Group)

ⓘ The setting values are shown below:



Target Availability Check

⓭ Target Availability Check ... Select whether to check the success of the connection to the target transceiver after a call. (Default: ON)

ⓘ If the Target Availability Check Success Beep or Target Availability Check Failure Beep is set to anything other than “None,” the Success Tone or Failure Tone sounds to indicate the connection status.
(⚙ > Option > Setting > Site Settings > Site No. > Beep/Ringer) (p.2-65)

Transmit

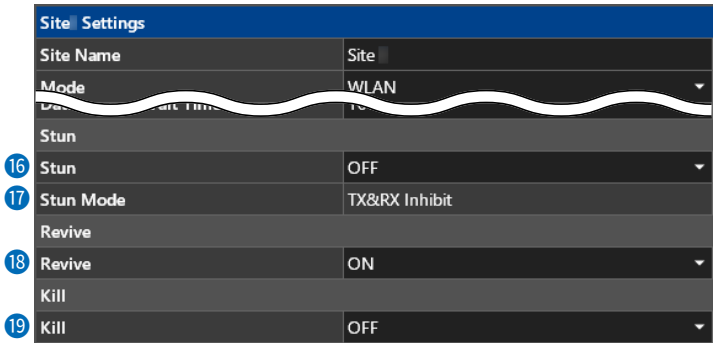
⓮ Number of Data Resend ... Select the number of times to resend the data between 1 and 10. (Default: 1)

⓯ Data Resend Wait Time (mSec) Select the wait time to resend the data. (Default: 1000)
Range: 500 ~ 2000 (milliseconds in 100 millisecond steps)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (in the WLAN mode)



Stun

⑯ Stun ..... Select whether to transmit Stun commands. A Stun command remotely disables the transceiver. Transmitting a Revive command to a stunned transceiver is necessary to operate the stunned transceiver again. (Default: OFF)

⑰ Stun Mode ..... Select the capabilities of the stunned transceiver. (Default: TX Inhibit)
Options:
- TX Inhibit: Inhibits the stunned transceiver from transmitting.
- TX&RX Inhibit: Inhibits the stunned transceiver from transmitting and receiving.

Revive

⑱ Revive ..... Select whether to transmit Revive commands.
Transmitting a Revive command restores a stunned transceiver to normal operation. (Default: ON)

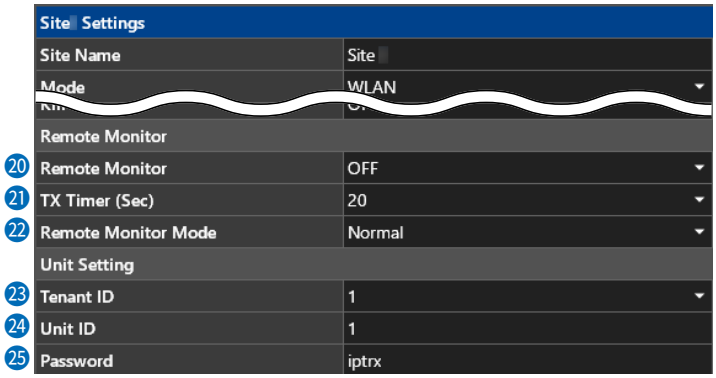
Kill

⑲ Kill ..... Select whether to transmit Kill commands.
A Kill command remotely disables the transceiver. The killed transceiver must be reprogrammed to operate the transceiver again. (Default: OFF)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (in the WLAN mode)



Remote Monitor

20 Remote Monitor ..... Select whether to transmit Remote Monitor calls. Remote Monitor calls cause the target transceiver to transmit the audio from its microphone. (Default: OFF)

21 TX Timer (Sec) ..... Set the time period so that the target transceiver transmits its microphone audio after receiving a Remote Monitor call. (Default: 20)
Range: 1 ~ 255

22 Remote Monitor Mode ..... Select the status of the target transceiver's indicator while transmitting its microphone audio after receiving a Remote Monitor call. (Default: Normal)

Options:
- Normal: The receiving transceiver's Status indicator lights while transmitting.
- Silent: The receiving transceiver's Status indicator does not light while transmitting.

Unit Setting

23 Tenant ID ..... Select a tenant ID between 1 and 10 to virtually separate the operating equipment. (Default: 1)
Range: 1 ~ 10

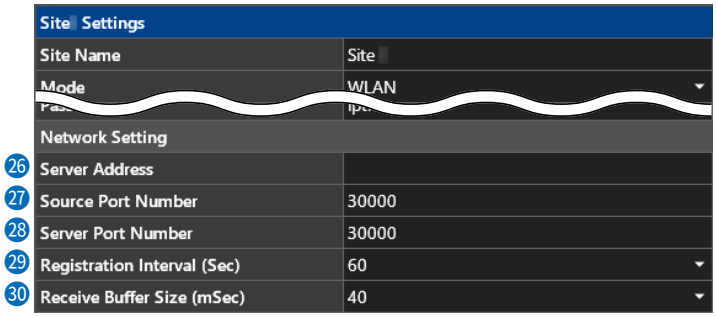
24 Unit ID ..... Enter a unit ID between 1 and 60000. (Default: 1)
Range: 1 ~ 60000

25 Password ..... Enter a password of up to 12 characters. (Default: iptrx)
Usable characters: A to Z, a to z, 0 to 9,
!\"#$%&/*'()-+.,?_<>@`=~^|{}[];:

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32

■ Site Settings (in the WLAN mode)



Network Setting

26 Server Address ..... Enter the IP address or the domain name of the Controller that the RC-FS20 accesses.
If no address or an invalid address is set, the RC-FS20 cannot access the Controller.
Usable characters: A to Z, a to z, 0 to 9, -, and.

27 Source Port Number ..... Enter either the server port number set on the Controller or a desired port number.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (30000), Site No. 2 (30002), Site No. 3 (30004), Site No. 4 (30006), ..., Site No. 32 (30062)
Range: 1 ~ 65535

28 Server Port Number ..... Enter a port number (UDP port) that the Controller will use to communicate with the WLAN transceivers.
ⓘ The default number differs, depending on the Site No., as shown below.
Default: Site No. 1 (30000), Site No. 2 (30002), Site No. 3 (30004), Site No. 4 (30006), ..., Site No. 32 (30062)
Range: 1 ~ 65535

29 Registration Interval (Sec) Enter the transmit interval for the registration information that the WLAN transceivers will use. (Default: 60)
Range: 30 ~ 300

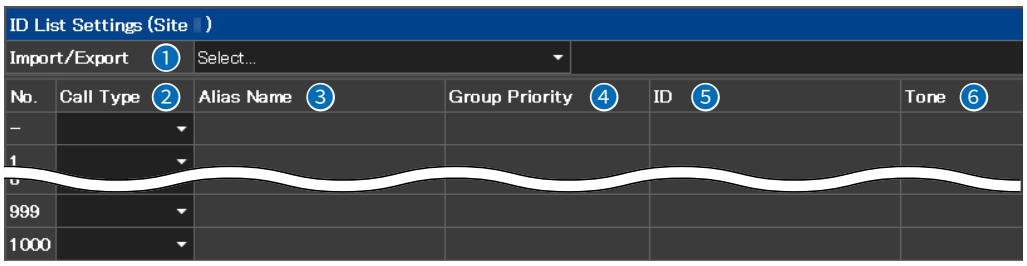
30 Receive Buffer Size (mSec) Set the buffer size to prevent the audio from breaking up. (Default: 40)
Range: 20 ~ 300 (milliseconds in 20 millisecond steps)

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32 > ID List

■ ID List Settings (in the WLAN mode)

Configure the ID List settings.



❶ Import/Export ..... Import or export the Individual, Group, and Telephone IDs.
Options:
- Import: Imports a maximum of 1000 WLAN Individual, Group, and Telephone IDs. The imported IDs are added to the ID List. While importing, if the IDs exceed 1000, the remaining IDs are not imported.
  Select a setting file (format: .csv), and then click <Open>.
- Export: Exports a maximum of 1000 WLAN Individual, Group, and Telephone IDs. The exported IDs are saved in a CSV file. Before exporting, enter the Individual, Group, and Telephone IDs in the ID List.
  Select a folder to export the file into and enter a file name, and then click <Save>.

❷ Call Type ..... Select the call type from “All,” “Individual,” “Group,” or “Telephone.”
ⓘ “All” is selectable for only the number “–.”
Only “Individual,” “Group,” or “Telephone” is selectable for the numbers 1 ~ 1000.

❸ Alias Name ..... Settable only when the Call Type is selected.
Enter an alias name of up to 16 characters.
ⓘ You can display the text instead of the ID number when an All call or the matched ID (Individual, Group, or Telephone) signal is received. If there is an empty, the transceiver displays the ID depending on the ID List settings.

❹ Group Priority ..... Settable only when the Call Type is set to “Group.”
Select “Normal” or “High” to set the priority in the Group call.

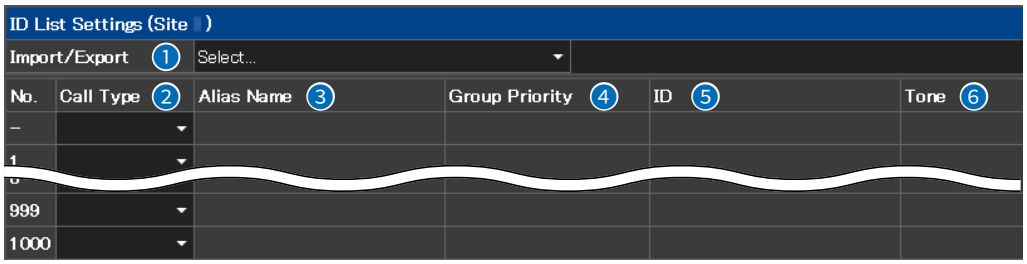
❺ ID ..... Settable only when the Call Type is set to anything other than “All.”
Enter an ID for the WLAN operation.
The ID list can save up to 1000 IDs.
ⓘ When the Call Type is set to “Telephone,” an ID of up to 31 characters can be set.
Range: 0 ~ 99999

Site Settings

> Option > Setting > Site Settings > Site 1 ~ 32 > ID List

■ ID List Settings (in the WLAN mode)

Configure the ID List settings.



6 Tone .....

Settable only when the Call Type is set to anything other than “All.”
Select the tone type that sounds when a matched ID is received.
(Default: Default)

Options:

- Default: The ringtone that is set in the Ringer On Receive sounds.
  (> Option > Setting > Site Settings > Site No. > Beep/Ringer > Ringer On Receive) (p.2-65)
- Tone 1 ~ 3: The selected ringtone sounds.
- Custom 1 ~ 10: A custom ringtone sounds. You can set the custom tones on the “Custom Beep” screen. (p.1-4)

Icom Inc.
1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan

A7872-2EX-1
© 2026 Icom Inc. Jul. 2026