Document No.	KN0491

Miwa Lock Co., Ltd.

ALV2

MIWA HOTEL CARDLOCK SYSTEM

DTU Operation Manual for Windows

2013/01/24 Version 0.3

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Introduction

Thank you for purchasing this Miwa Lock product.

The ALV2 is a hotel card lock system ideal for various hotel environments.

The Purpose of This Manual

This manual explains how to operate and deploy the DTU Software.

To have an overview of the entire system, the card types used, and how to operate the application switch software (FDS Launcher), please refer to "ALV2 System Summary for Windows".

Please also refer to the following manuals for the other products of this system:

"ALV2 Windows PC Server Software Operation Manual for Windows"

"ALV2 CCU Software Operation Manual for Windows"

"ALV2 Setup Manual for Windows"

Prerequisites

This manual is intended for users who will deploy and operate this system. Therefore, this manual assumes that the reader has the following knowledge. Please refer to other documents whenever necessary as you read this manual.

- Basic knowledge of personal computer and Windows
- Knowledge of related systems

About This Manual

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- The screenshots contained in this manual are for reference only. The actual screens may be different. The contents of this manual are subject to change without prior notice.
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Icons Used in This Manual

The icons listed below are used throughout this manual.

Warning

Indicates a matter which may severely affect the system.
Be sure to check it.

Confirmation

Indicates a matter which may affect the system.
Be sure to check it.

Purpose

Indicates the aim or purpose of an operation.

Operation

Indicates the operation to be performed

Tip

Useful information.

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1. Overview

1.1. What is DTU Software?

The DTU (Data Transaction Utility) is a Windows laptop PC with the Data Transaction Utility installed, and an infrared communication device connected to communicate with card locks. It is used for maintenance tasks such as setup, lock control, and history extraction.

Warning

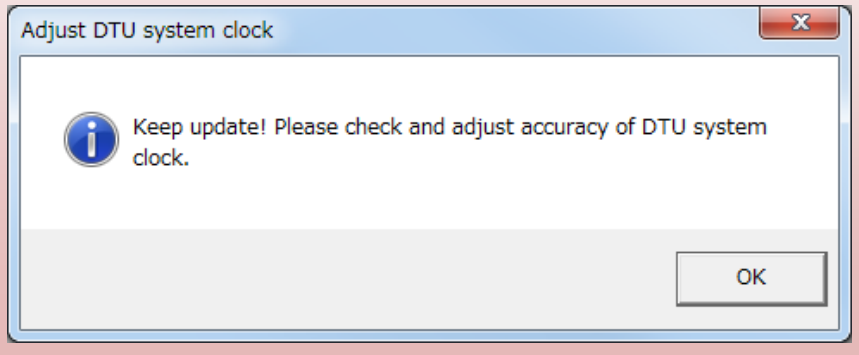
This software identifies the terminal device through the "authentication SD card". Be sure to use the original authentication SD card which was pre-installed in the system upon purchase. Otherwise, the system will not function correctly. Note that the system also will not function if the authentication SD card is write-protected.

Confirmation

You will be logged out of the software if you do nothing for a certain period of time. This auto logout time (DTU auto log-off time) can be set with the PC Server. The default logout time is 180 sec.

Warning

This software is programmed to adjust time once a day. When a function that writes the current time to the card lock (e.g., lock initialization, lock time adjustment, and lock setting edit) is selected, the DTU time will need adjustment. The time set on the DTU is written to the card lock. If the DTU time is not correct, not only an error but also a security incident may occur. Refer to "2.5. Adjusting DTU Time" for the details.



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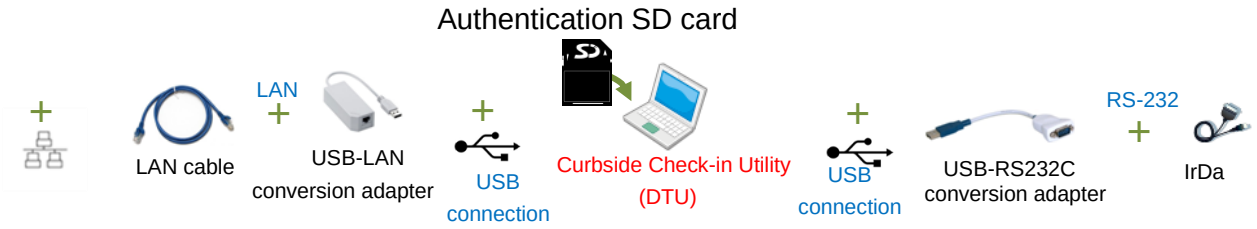
・ System configuration example



1.2. DTU Card

The DTU card is one of the "administration card" types and is used for authentication when the DTU and a card lock exchanges data. When using the DTU to communicate with the card lock, place the DTU card over the card lock. The LED on the card lock turns on and the card lock waits for an infrared signal from DTU for 7 seconds. The DTU and the card lock can only communicate with each other during this period.

* DTU: A Windows PC where the DTU software is installed.

Confirmation You do not need to place the DTU card over the card lock while the lock is in the EM (emergency unlocking status) mode.

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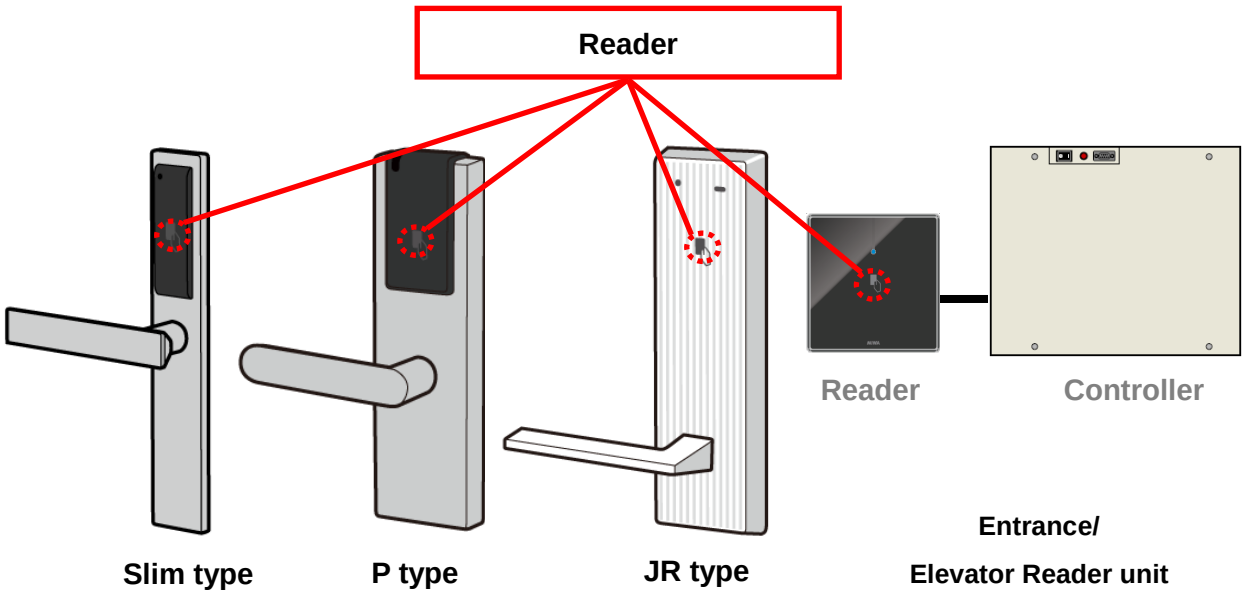
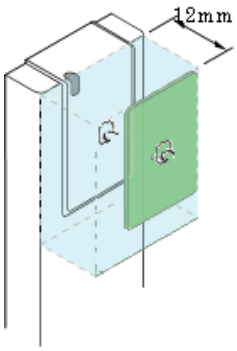
1.3. Lock Types and Part Names

Four types of ALV2 card locks are used to communicate with the DTU; P type, Slim type, JR type, and entrance/elevator reader. They are described below. Note that this manual uses the P type card to explain the operation method. Change the card type as necessary if you are using another type.

1.3.1. Reader

The reader can communicate with the DTU card by placing the card over it within a distance between 0 and 12 mm





Within 12 mm from lock
Hold for approx. 1 second

Reader is identified by this mark.

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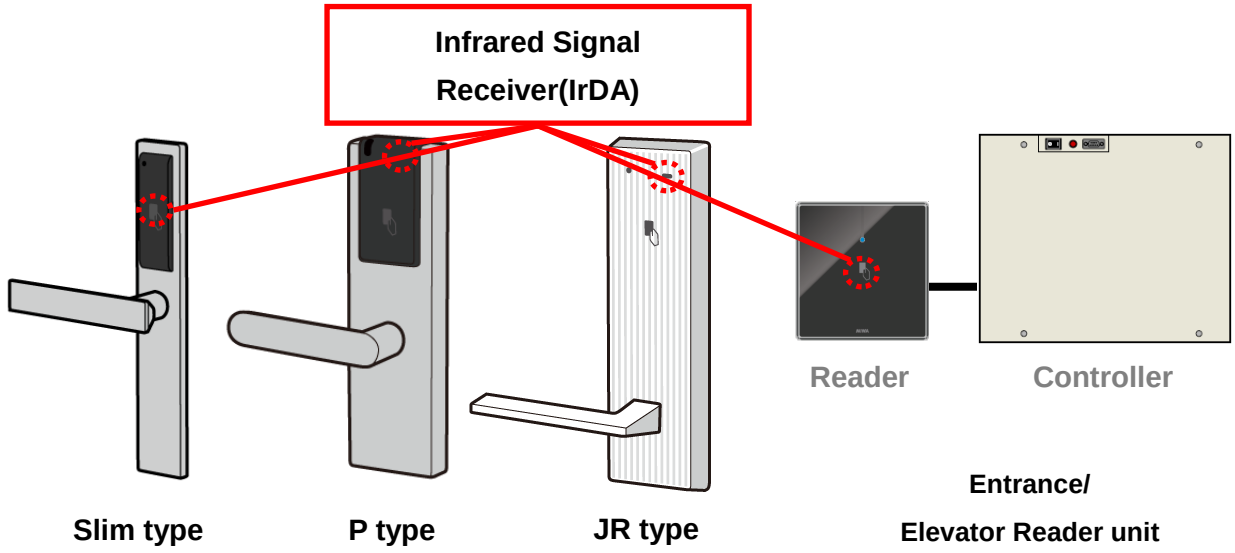
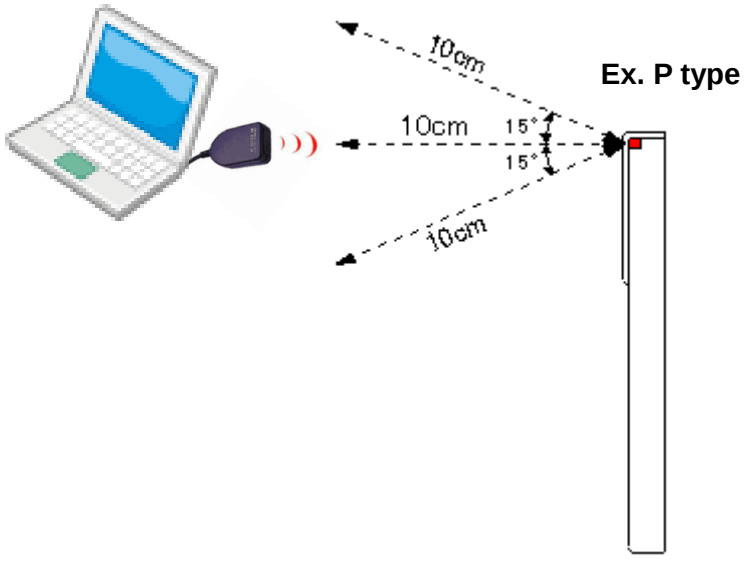
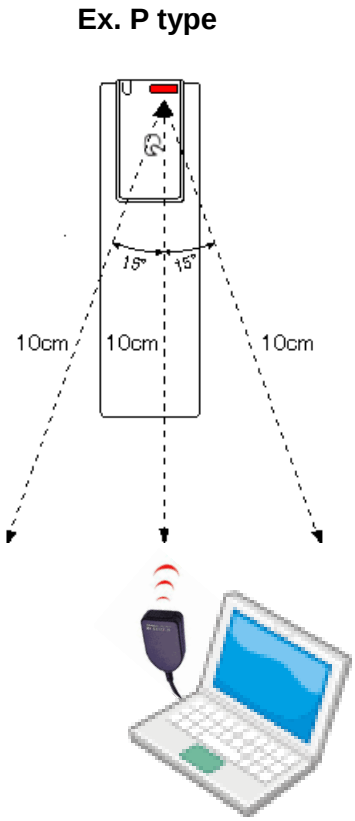
1.3.2. Infrared Signal Receiver

The infrared signal receiver transmits and receives data within a distance between 0 and 10 cm at an angle within 15 degrees in every direction.







* This illustration uses a Windows laptop PC.

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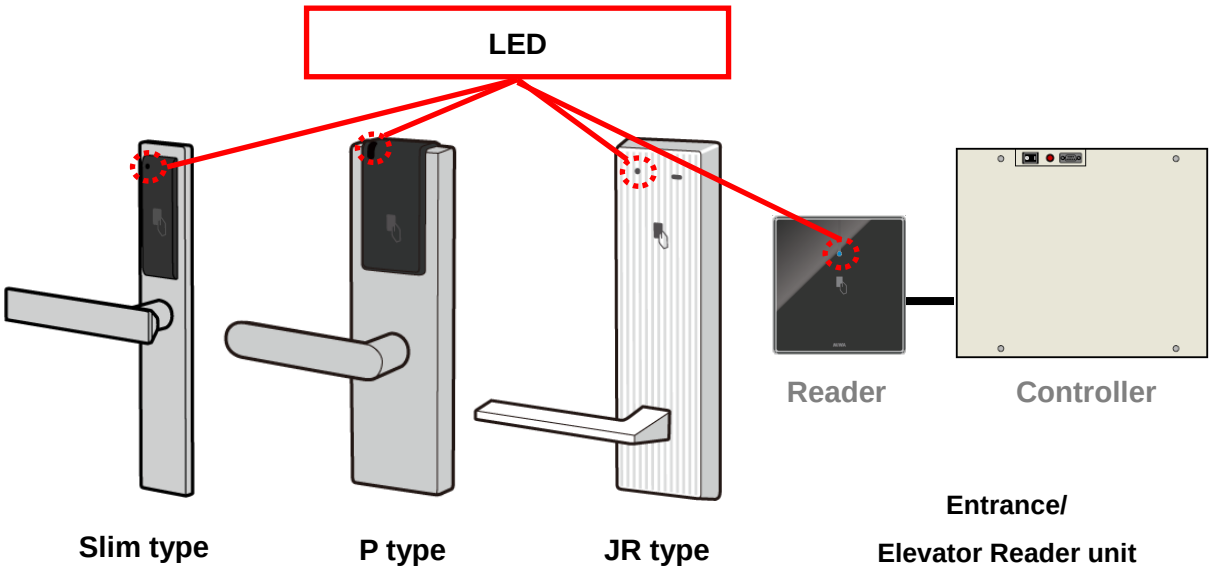
1.3.3. LED

The LED indicates the lock status.

- **Green** : A valid card has been placed over the card lock and the lock is now released.
- **Blue** : A valid card has been placed over the entrance/elevator reader and validated.
- **Red** : An invalid card has been placed over the lock.
- **Orange** : A valid DTU card has been placed over the lock and it has entered the DTU communication mode.

Warning

The DTU communication mode is enabled for 7 seconds. If nothing happens during this term, the LED turns off in 7 seconds and the DTU communication mode is disabled.



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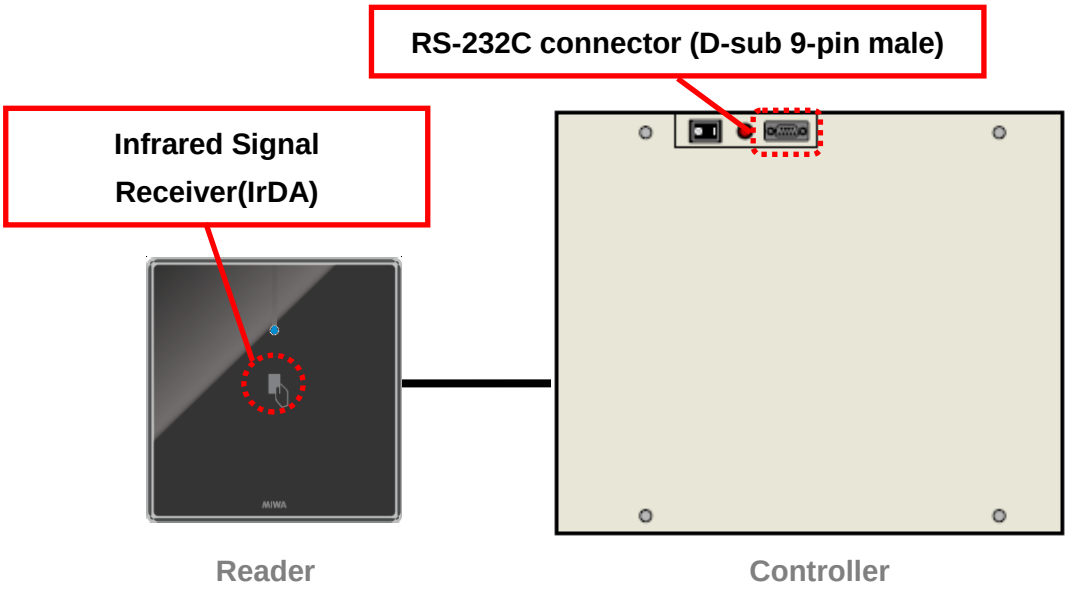
1.3.4. RS-232C Communication

For the entrance/elevator reader, you can also connect it to the controller's RS-232C connector using a USB serial conversion cable and RS-232 interlink cross cable. For the details of data communication method, refer to "2.3.2. Using RS-232C Communication".



entrance/elevator reader unit

Tip The entrance/elevator reader can exchange data with the DTU using the infrared communication and RS-232C communication.

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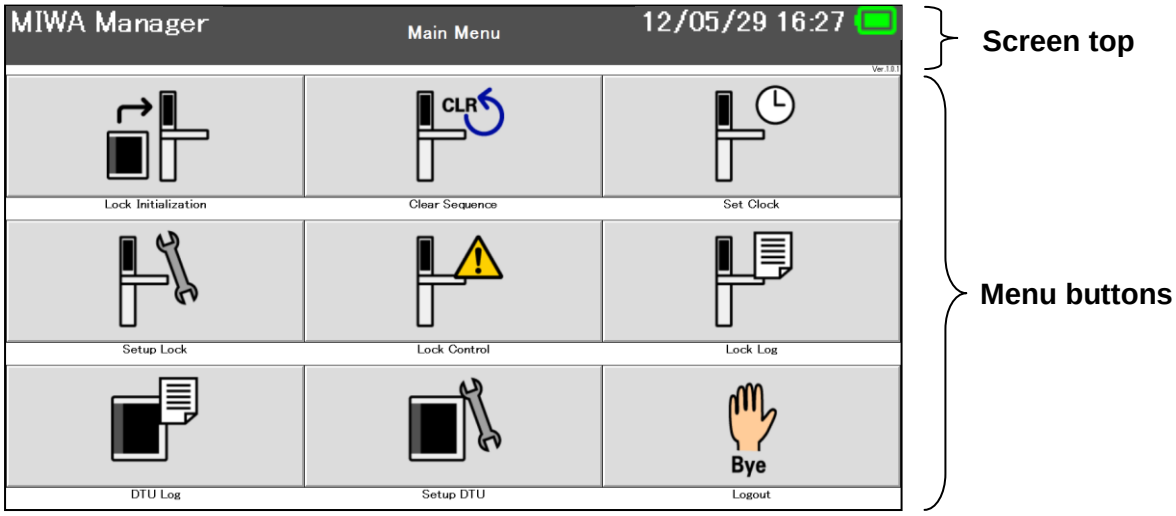
1.4. DTU Software Components

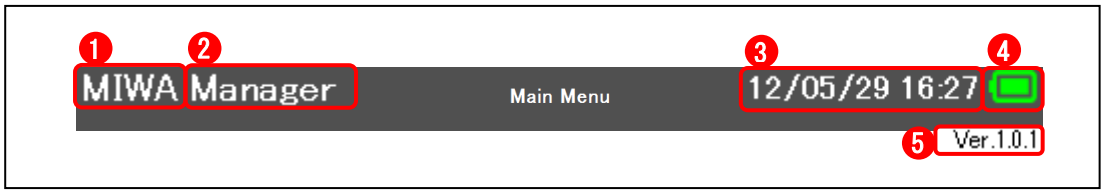
This section describes the DTU software components at the top of the screen and on the menu.



Confirmation

Some menus may be unavailable depending on the login code (i.e., privilege).
The buttons for unavailable menus are not shown.

- **Screen top**



1. Hotel name
2. Authorization type (privilege) of login user
3. Current date and time
4. Battery level icon (3 levels)
   - Battery level is sufficient (66% or higher).
   - Battery level is low. Charge it as soon as possible (66% - 33%).
   - Battery level is almost discharged. Stop using it and charge it (33% or lower).
5. DTU software version

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・ Menu buttons

The table below summarizes each menu.

Icon	Name	Purpose
	Lock Initialization	Initializes card lock by assigning the room number and other information based upon the initial values set by the PC Server.
	Clear Sequence	Clears the sequence stored on the card lock.
	Set Clock	Adjusts the time data stored on the card lock to the time maintained by the DTU software.
	Setup Lock	Edits the settings of the card lock.
	Lock Control	Sets and resets the emergency open/lockout status.
	Lock Log	Loads the lock log and error log information stored on the card lock into the DTU.
	DTU Log	Lists the operation log of the DTU software.
	DTU Setup	Changes settings of the DTU software and transfers the lock log to the PC Server.
	Logout	Logs out of the system and displays the login screen again.


Confirmation

Some menus may be unavailable depending on the login code (i.e., privilege).

The buttons for unavailable menus are not shown.

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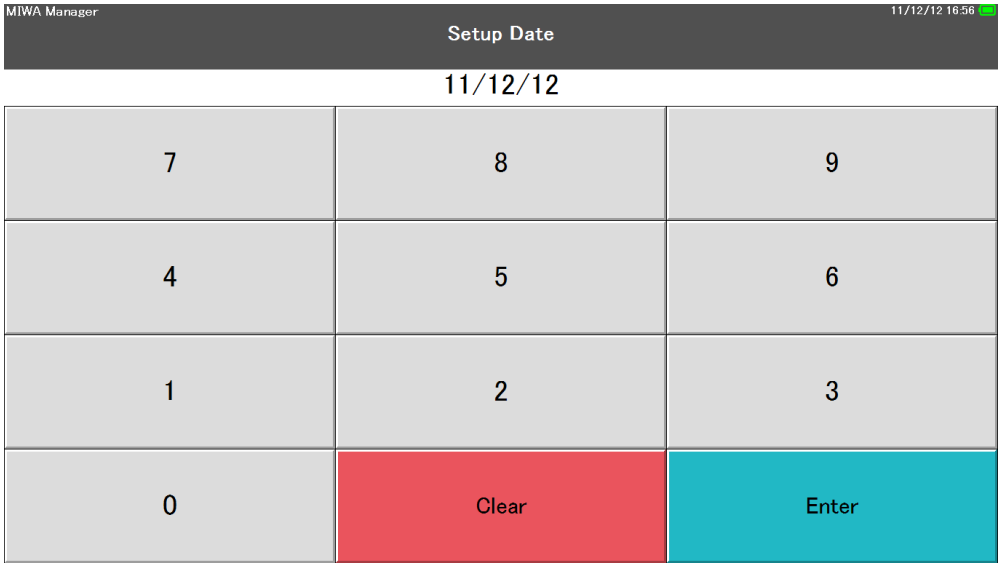
Supplement Software keyboard

Whenever you are required to enter numeric information (e.g., login ID or date), the software keyboard (a ten-key pad) shown below appears when you place the cursor in the input field. If you are using the PC keyboard and you will not use the software keyboard, uncheck the "Software Keyboard" option under the Setup DTU menu.



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2. Basic Operation

2.1. Startup and Termination

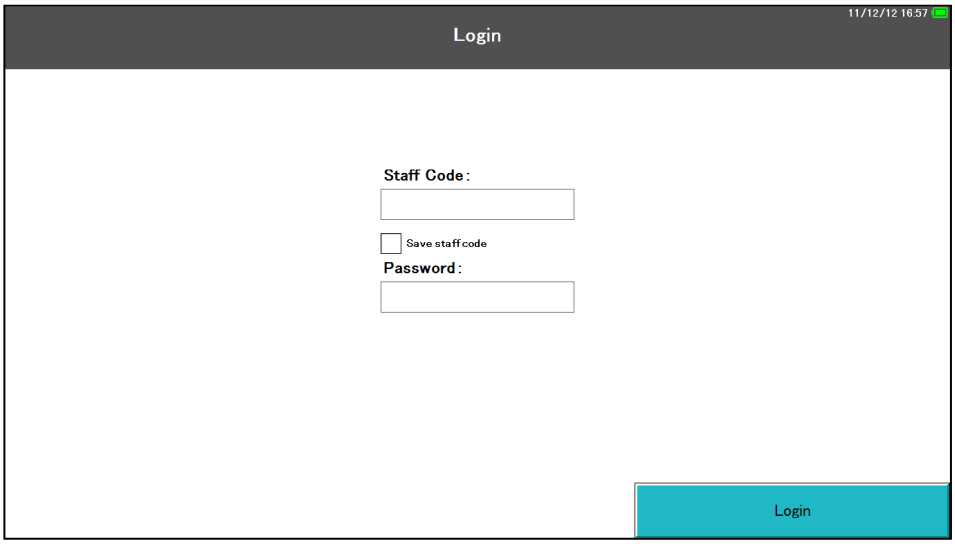
2.1.1. Startup

Purpose Start up the DTU software.

1 Start up the DTU software. 1/4

Operation Start up Windows and double-click the DTU shortcut on the desktop.

The login screen for the DTU software appears as shown below.



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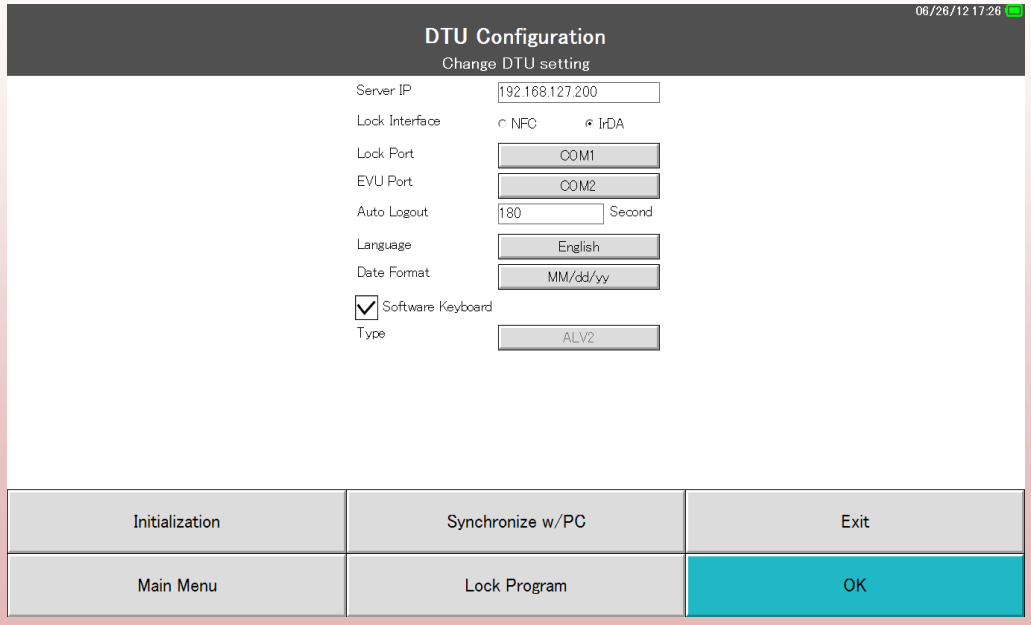
Confirmation

If the Configuration screen appears instead of the Login screen, this means that the initial setup of the DTU software has not been completed. Refer to "ALV2 Setup Manual for Windows" to perform initial setup.



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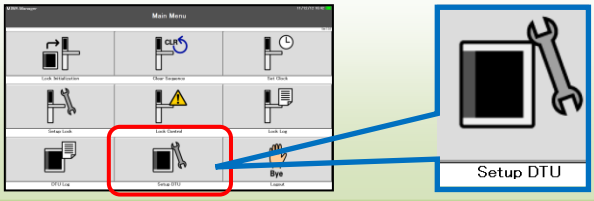
2.1.2. Termination

Purpose Terminate the DTU software.

2 Display the Configuration screen. 2/4

Confirmation You need a staff code with administrator privilege to terminate the DTU software.

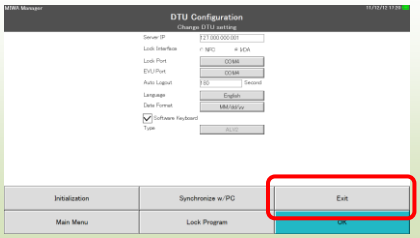
Operation Click "Setup DTU" on the Main Menu.



The following DTU Configuration screen appears:

3 Terminate the DTU software. 3/4

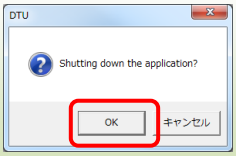
Operation Click "Exit".



The following confirmation screen appears.

4 Confirm termination. 4/4

Operation Click the [OK] button.



This terminates the DTU software.

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2.2. Login and Logout

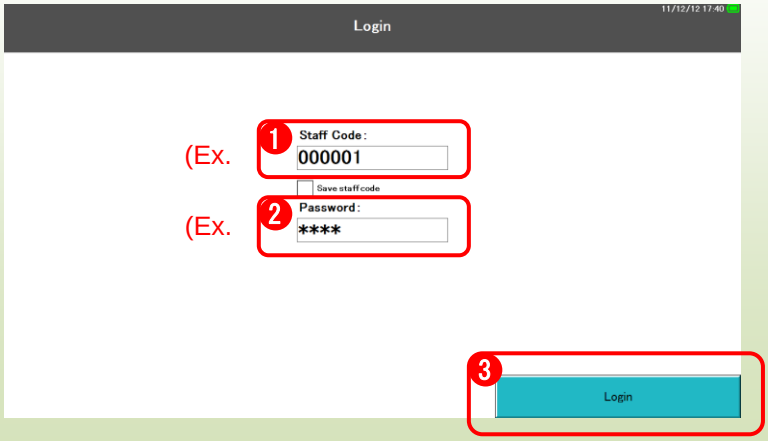
2.2.1. Login

Purpose Log into the DTU software.

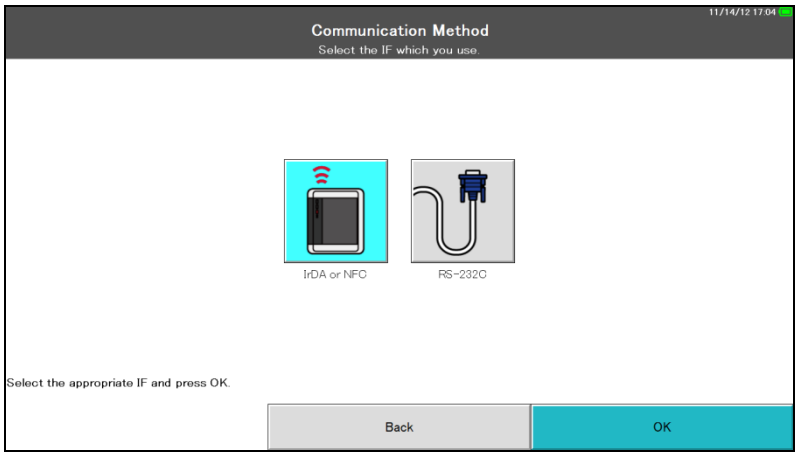
1 Log into the DTU software. 1/2

Operation

1. Enter the staff code.
2. Enter the password (shown as ****).
3. Click the "Login" button.



If the login is successful, the following "Communication Method" screen appears. When you select the communication method, the Main Menu will appear.



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2 Select the communication method. 2/2

- **IrDA or NFC**

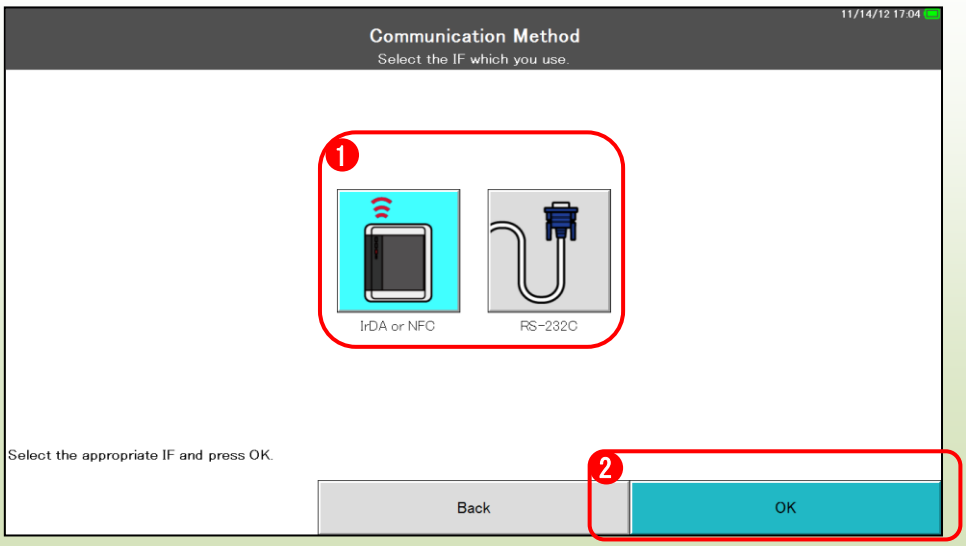
  Select this option for infrared communication (IrDA). * NFC communication is currently not available.

- **RS-232C**

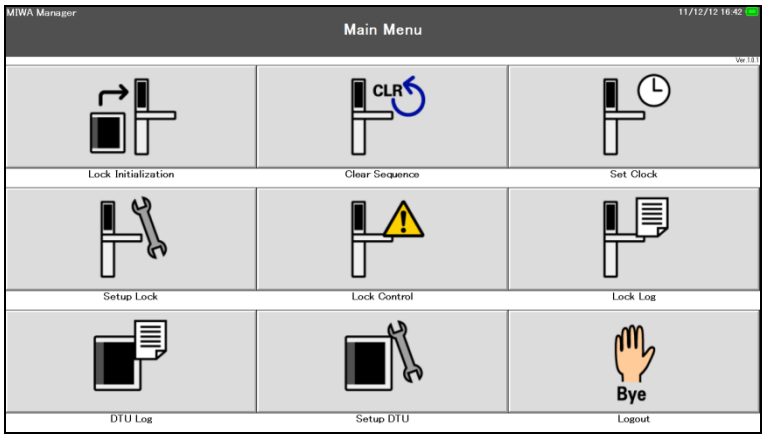
  Select this option for communication using the RS-232C connector at the control section of the entrance/elevator reader.

Operation

1. Select the communication method.
2. Click the [OK] button.



The following Main Menu appears. Refer to the following chapters for the details.



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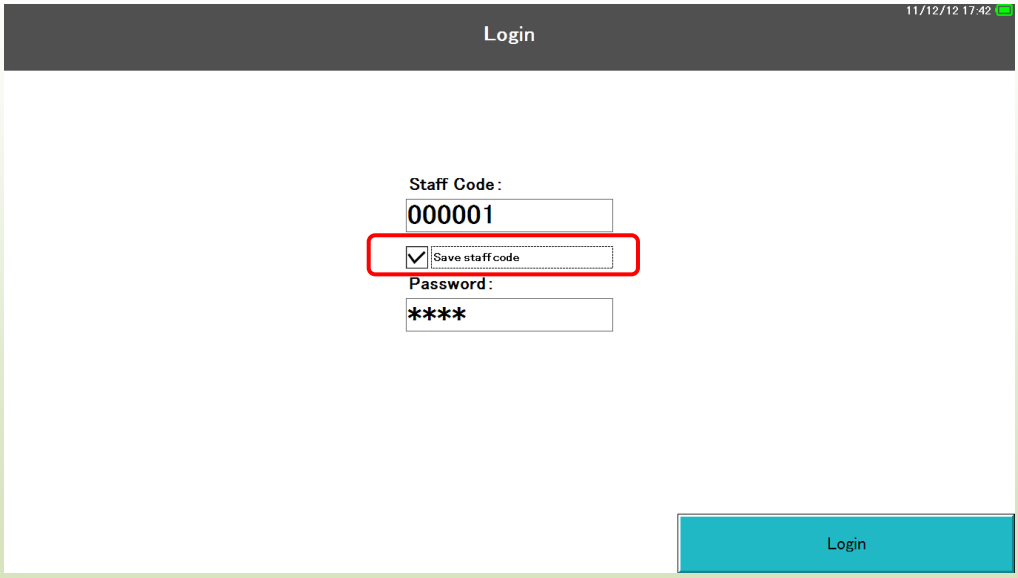
Tip

If you check "Save staff code", the entered staff code will be displayed by default at the next login.



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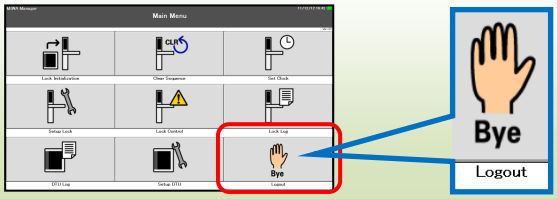
2.2.2. Logout

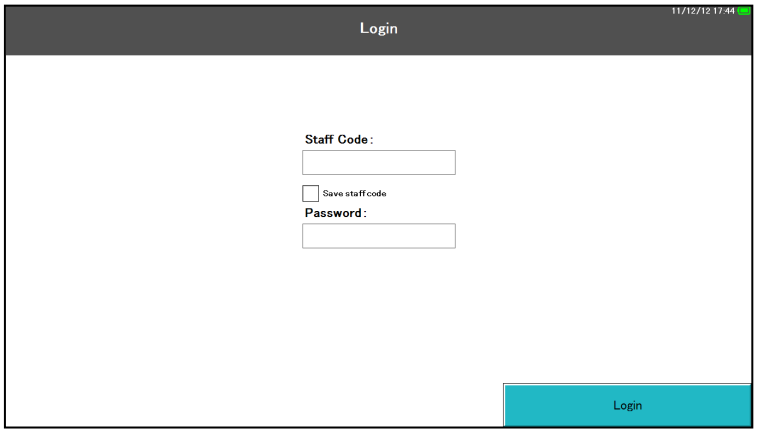
Purpose Log out of the DTU software.

1 1 Log out of the DTU software. **1/1**

Operation Click the "Bye" button on the Main Menu.



The following Login screen appears. You are now logged out of the software.



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2.3. Data Exchange with Card Lock

The DTU can exchange data with the card lock using the infrared (wireless) communication and RS-232C communication. NFC communication is currently not supported.

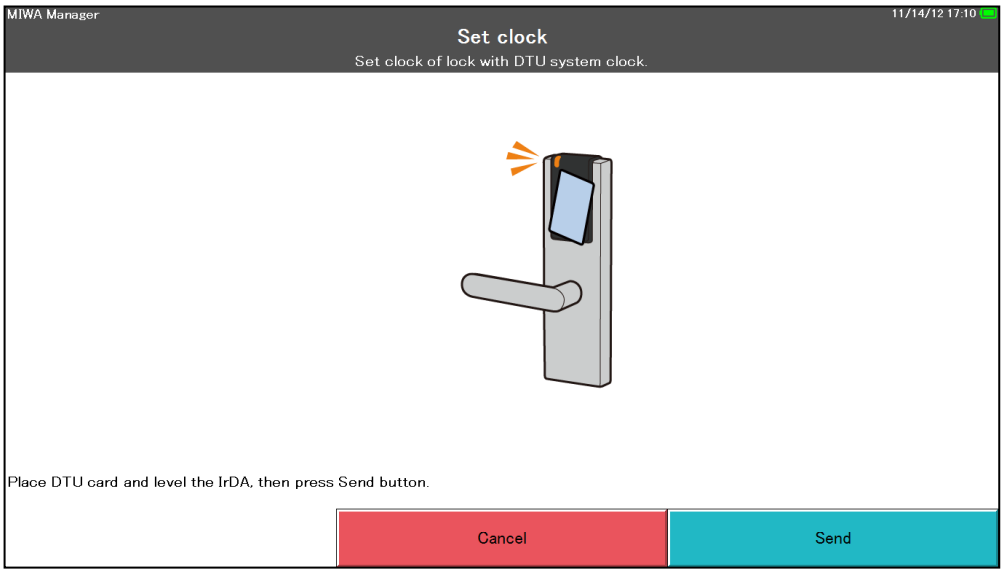
2.3.1. Using Infrared Communication

The following describes how to exchange data with the card lock via the infrared communication.

Warning The following description uses the Lock Initialization menu. Submenus and messages will be different for other menus.

Warning The following description uses P-type card lock. The location of the infrared signal receiver is different for each card lock type. Refer to Section 1.3 for the details.

Navigate through the menus until you reach the following screen with an animation showing start of data transmission.



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1 Switch the card lock to the DTU communication mode. 1/3

Operation

As the animation indicates, place the DTU card over the card lock reader.

※ The reader image is different for each card lock type. Refer to Section 1.3 for details.

The LED turns on to orange and the card lock switches to the **DTU communication mode** (where data exchange is possible).

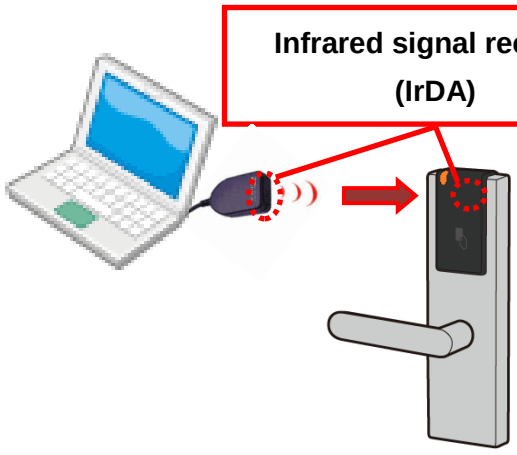
Warning

The DTU communication mode lasts for 7 seconds. If you do nothing during this term, the LED automatically turns off in 7 seconds and the DTU communication mode terminates. In this case, place the DTU card over the reader again to initiate the DTU communication mode again.

2 Point the infrared signal receiver toward the card lock. 2/3

Operation

While the LED is on, point the infrared signal receiver of the DTU toward the infrared signal receiver of the card lock.



※ Location of the infrared signal receiver is different for each card lock type. Refer to Section 1.3 for the details.

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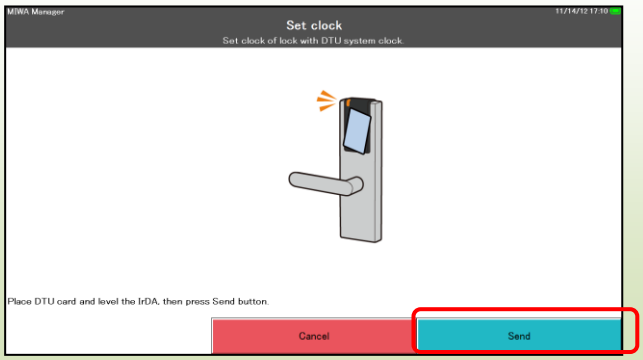
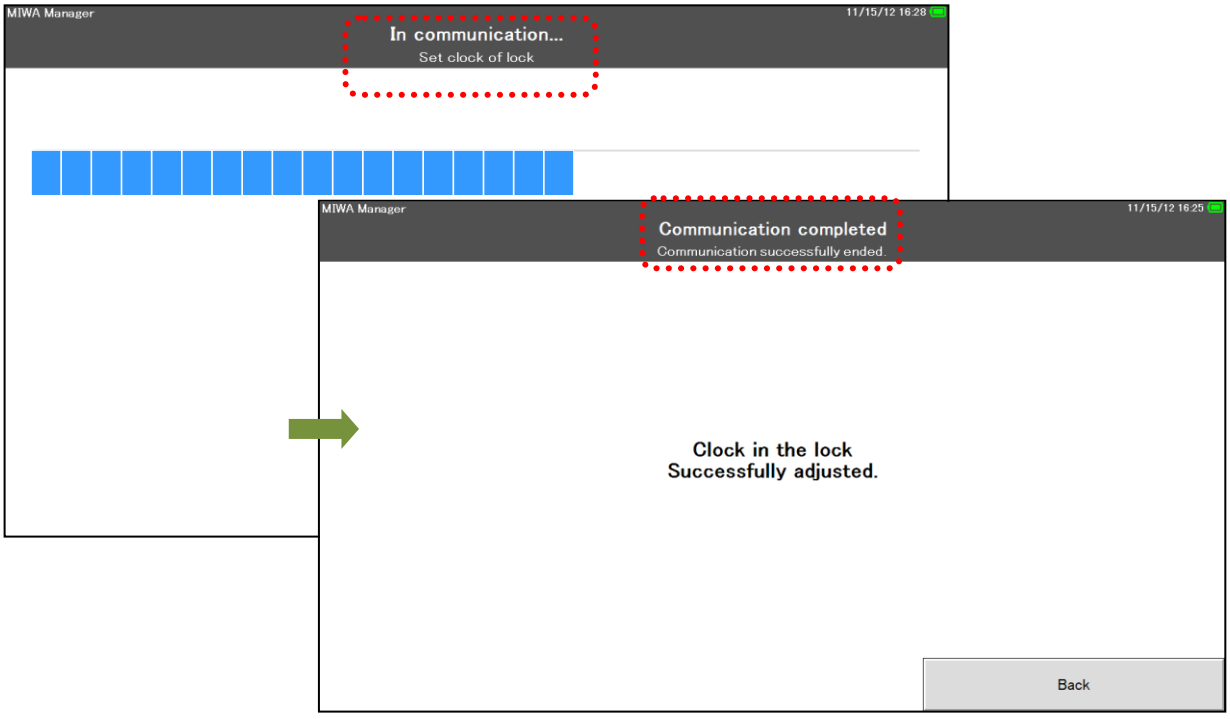
3 Start sending data. 3/3

Operation

While the infrared signal receivers are facing each other and the LED is on, click the "Send" button on the DTU software.



When data communication completes successfully, the header of the dialog box changes from "In communication …" to "Communication completed" and the message "Clock in the lock Successfully adjusted." appears. Data communication is now completed.



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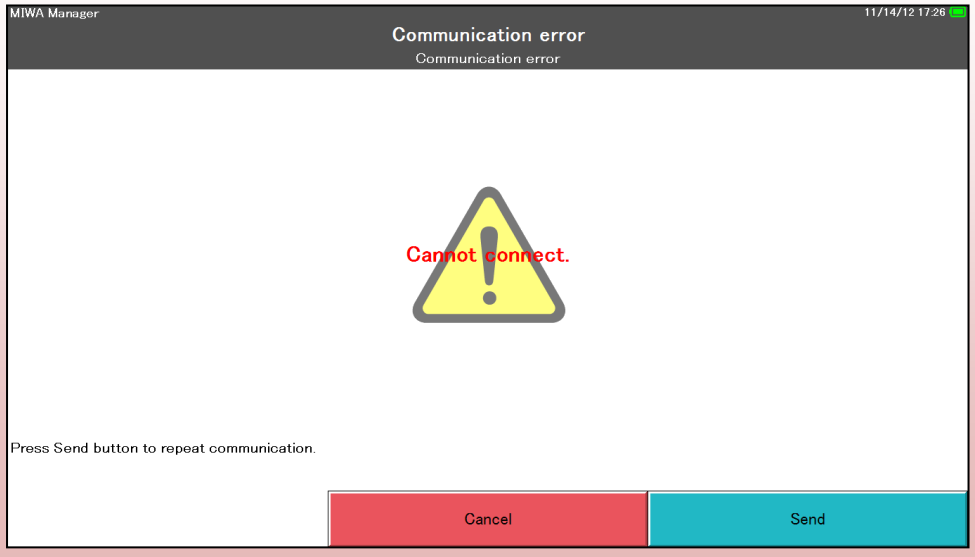
Confirmation

If a connection error or action failure occurs during communication, the following "Communication error" dialog box appears. Check the connection and settings of the devices and try again.



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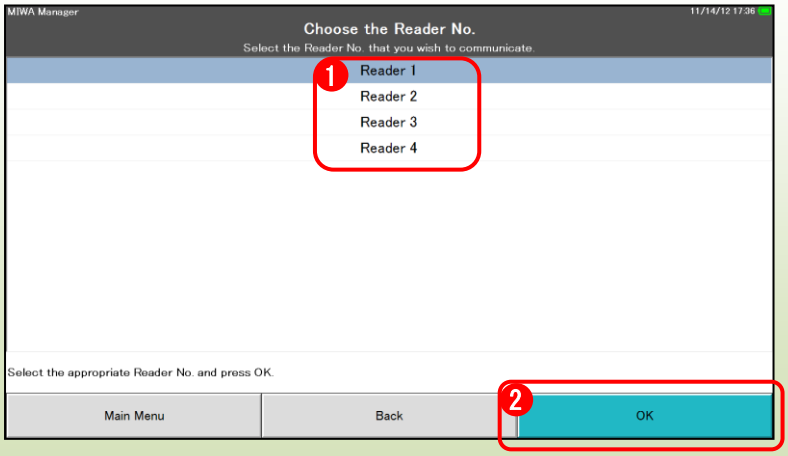
2.3.2. Using RS-232C Communication (for Entrance/Elevator Reader only)

You can exchange data between the DTU and entrance/elevator reader using the RS-232C communications. To use this method, choose "RS-232C" on the dialog box to choose the communication method, appearing after logging into the DTU software. Refer to "2.2.1. Login" for details.

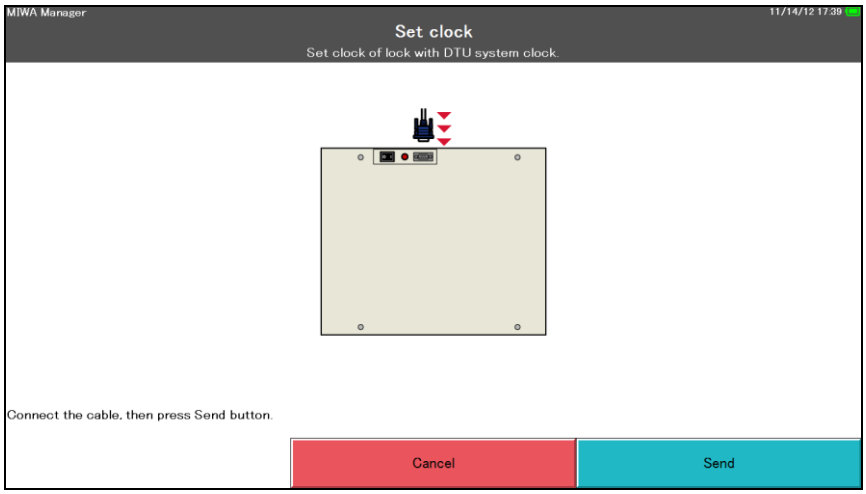
1 Choose the reader. 1/3

Operation

1. Choose the reader number.
2. Click the "OK" button.



The following Set Clock screen appears.



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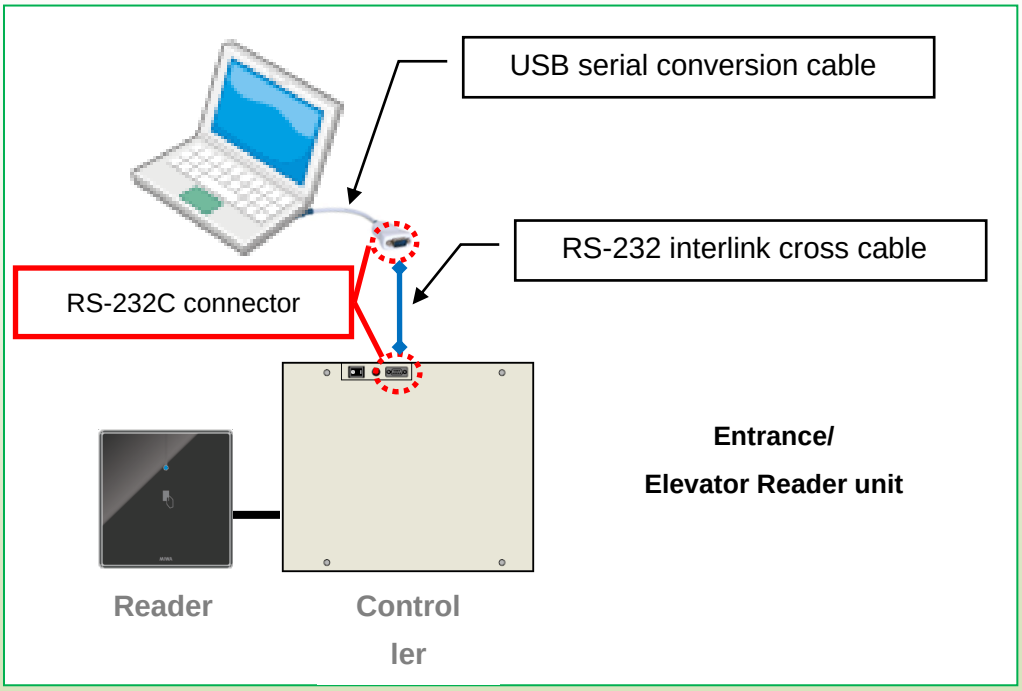
2 Connect the RS-232C cable. 2/3

Operation

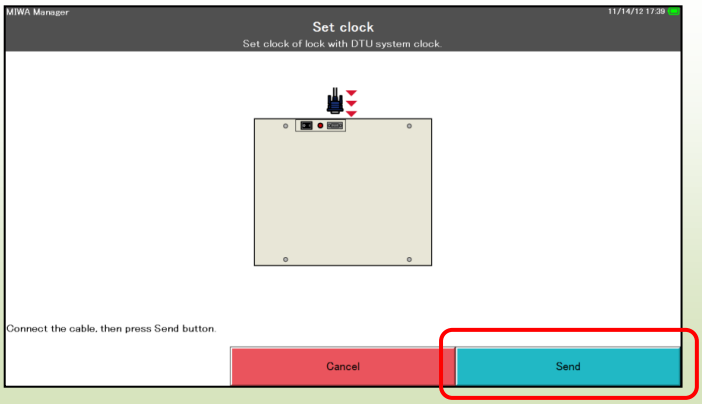
Connect the RS-232 interlink cross cable to the USB serial conversion cable from the DTU, and then firmly connect it to the RS-232C connector of the controller.



3 Start sending data. 3/3

Operation

Click the "Send" button.



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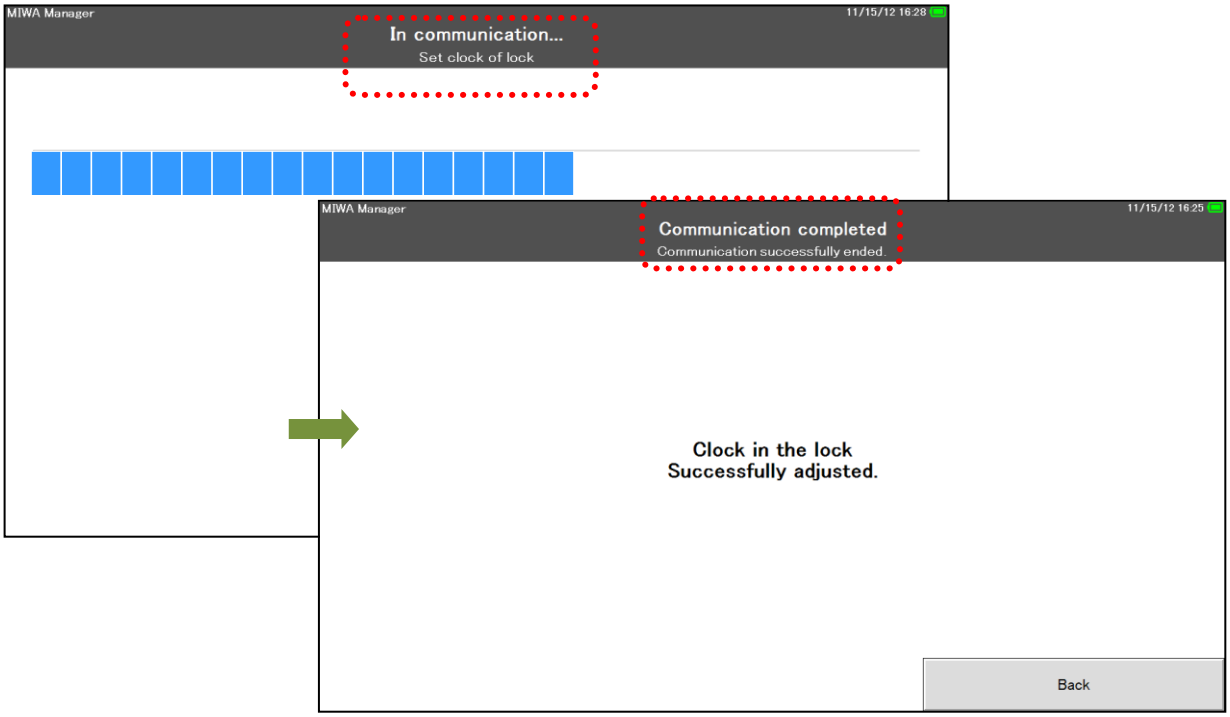
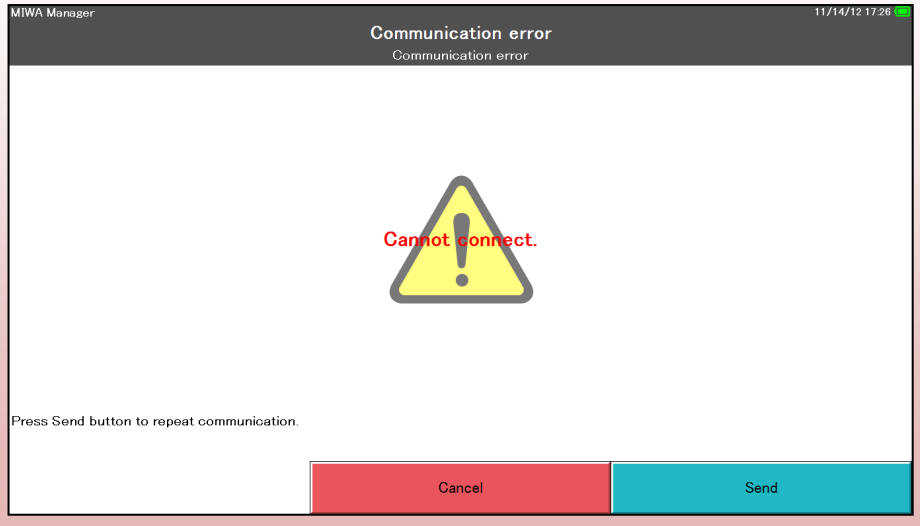
The header of the dialog box changes from "In communication …" to "Communication completed" and the message "Clock in the lock Successfully adjusted." appears. Data communication is now completed.



Confirmation

If a connection error or action failure occurs during communication, the following "Communication error" dialog box appears. Check the connection and settings of the devices and try again.



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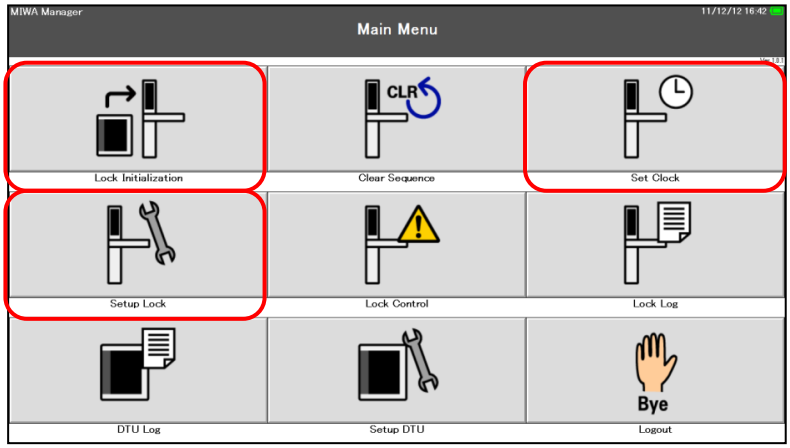
2.4. Adjusting DTU Time

When you select a function which involves registration of the time to the card lock (i.e., Lock Initialization, Set Clock, and Setup Lock) for the first time in a day, the Adjust DTU system clock screen appears.

Menus involving registration of the time to the card lock



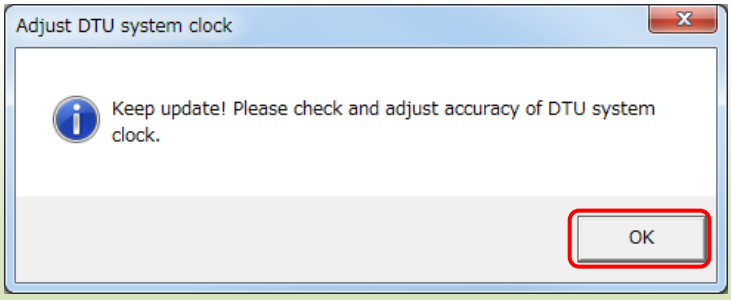
- **Lock Initialization**
- **Setup Lock**
- **Set Clock**

Before the selected menu screen appears, the following dialog box opens.

1 Confirm the message and go to the Setup DTU system clock screen. **1/2**

Operation

Confirm the message and click the "OK" button.



The Setup DTU system clock screen shown on the next page appears.

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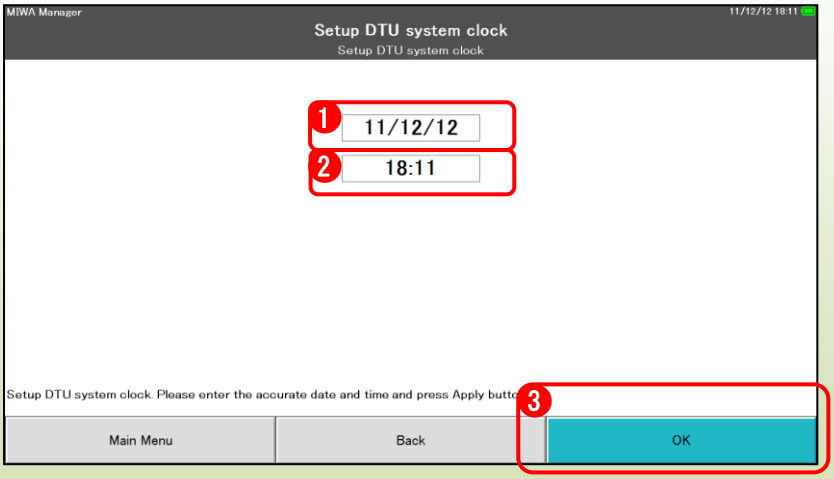
2 Confirm the date and time and adjust if necessary. 2/2

Operation

1. Confirm the date and adjust it if it is not correct.
2. Confirm the time and adjust it if it is not correct.
3. Click the "OK" button.



When you click the "OK" button, the selected menu screen appears. For the details of each menu, refer to the corresponding section.

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3. Lock Initialization

Purpose Register data (e.g., room number) to the card lock and valid card information to the entrance/elevator reader.

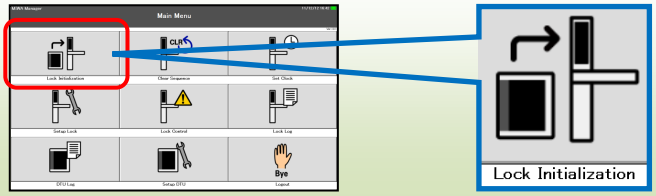
Warning You need to perform lock initialization for every card lock and entrance/elevator readers used in the hotel before operation.

Warning You can only use the DTU and construction cards until lock initialization completes.

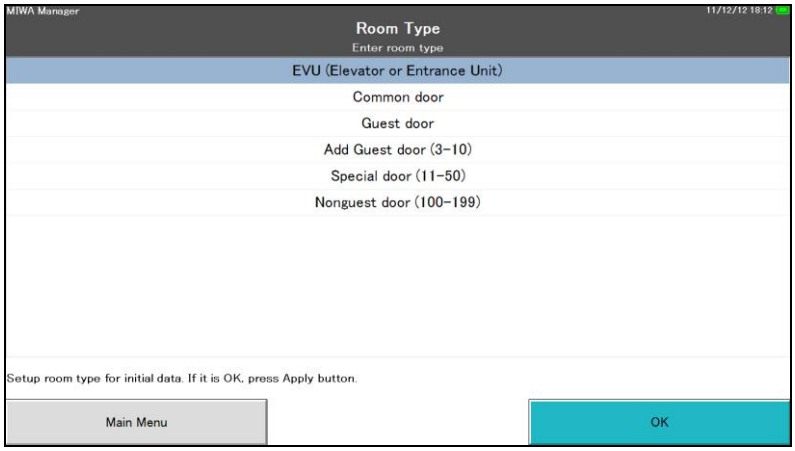
Warning The default values are set by the PC Server. Perform lock initialization after configuration with the PC Server is completed.

1 Open the Lock Initialization screen. 1/3

Operation Click the "Lock Initialization" button on the main menu.



The Room Type screen appears before the Lock Initialization screen opens.



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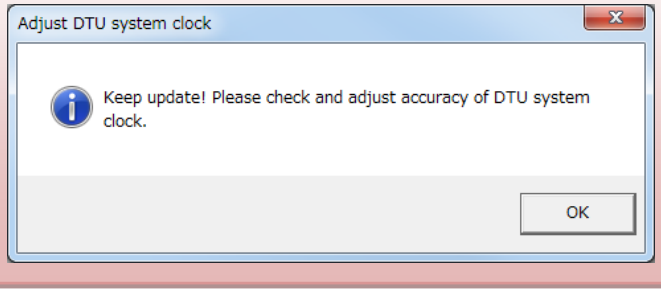
Confirmation

When you select this menu for the first time in a day, the Adjust DTU system clock dialog box may appear. If this is the case, refer to "2.4. Adjusting DTU Time" and adjust the system clock.



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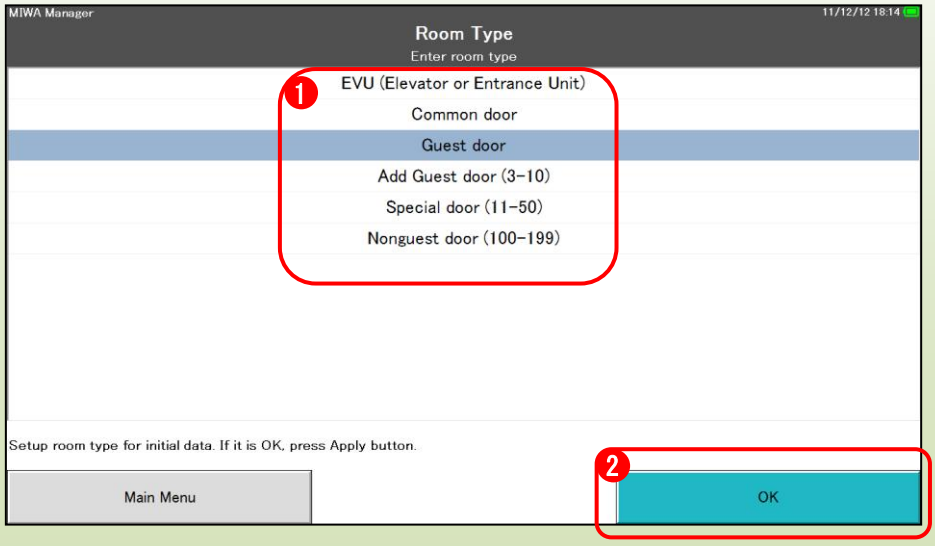
2 Choose the room type. 2/3

- EVU : Entrance/elevator reader
- Common door : Common door (card lock)
- Guest door/Add guest door : Guest room (card lock)
- Special door : Shared facilities (card lock)
- Nonguest door : Room other than guest room (card lock)

Operation

1. Choose the room type to perform lock initialization.
   - For "EVU", refer to "Supplement EVU (Entrance/Elevator) Room Range Setting" on Page 35.
   - For "Common door", refer to "Supplement Common Door (Card Lock) Room Range Setting" on Page 39
   - For "Add guest door", "Special door", or "Nonguest door", refer to "Supplement Room Type Number Specification".
2. Click the "OK" button.



When you select "Guest door", the Lock Initialization screen shown on the next page appears.

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Confirmation

Each room type is assigned a number or numbers and managed by the PC Server software. Check for the number assignment in "Room Type Setting" in the PC Server software.

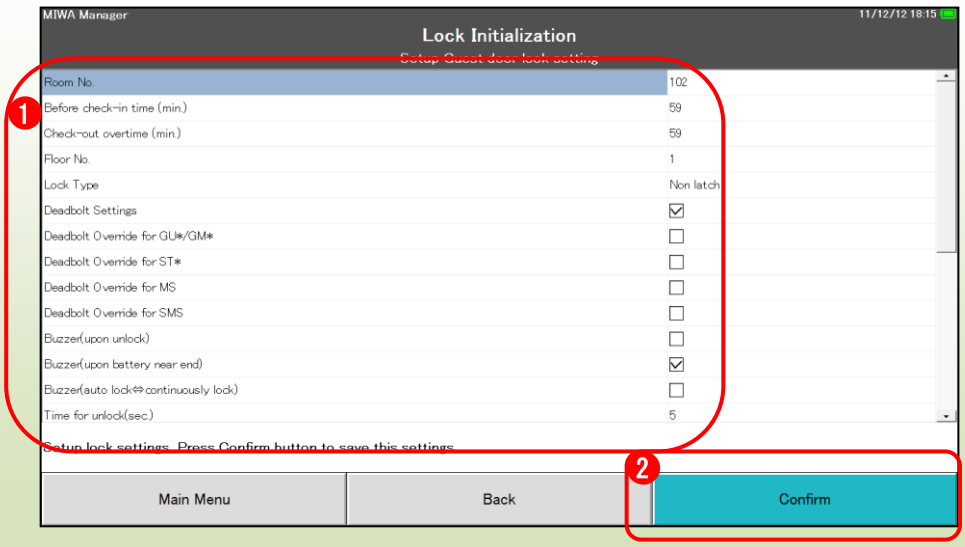
Room type name	Room type number
EVU	0
Common door	1
Guest door	2 - 10
Special door	11 - 50
Nonguest door	100 - 199

3 Select items to change. 3/3

For the details of the items, refer to "Appendix: Details of Lock Initialization Values".

Operation

1. Select items to change from the default values.
2. Click the "Confirm" button.



For the procedure after clicking the "Confirm" button, refer to "2.3.Data Exchange with Card Lock".

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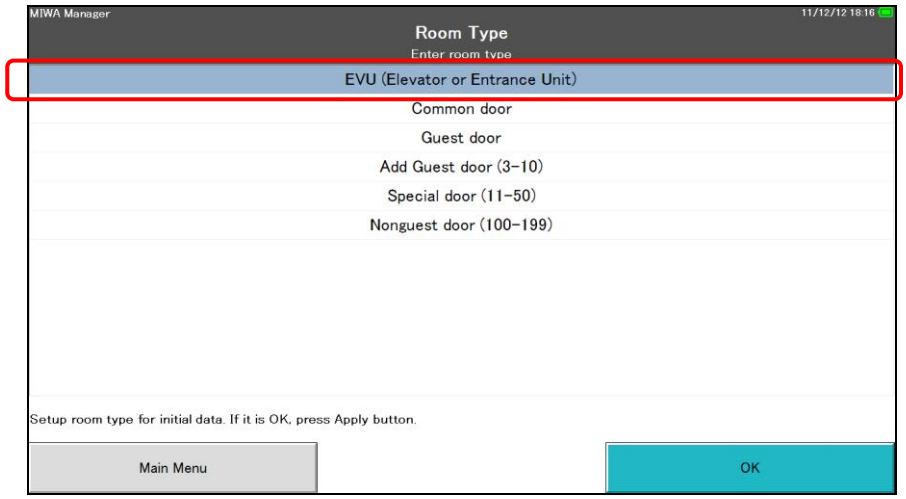
Supplement EVU (Entrance/elevator) Room Range Setting

For "EVU", you can set the contact output number for each room range.

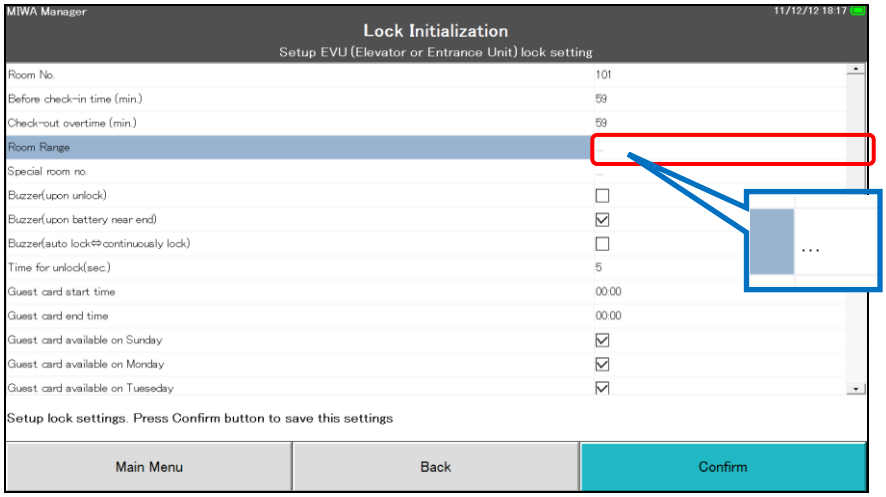
The procedure is as follows:

Choose "EVU".



The following Lock Initialization screen appears.

Choose "..." at the right of "Room Range".



The following Set Room Range screen appears.

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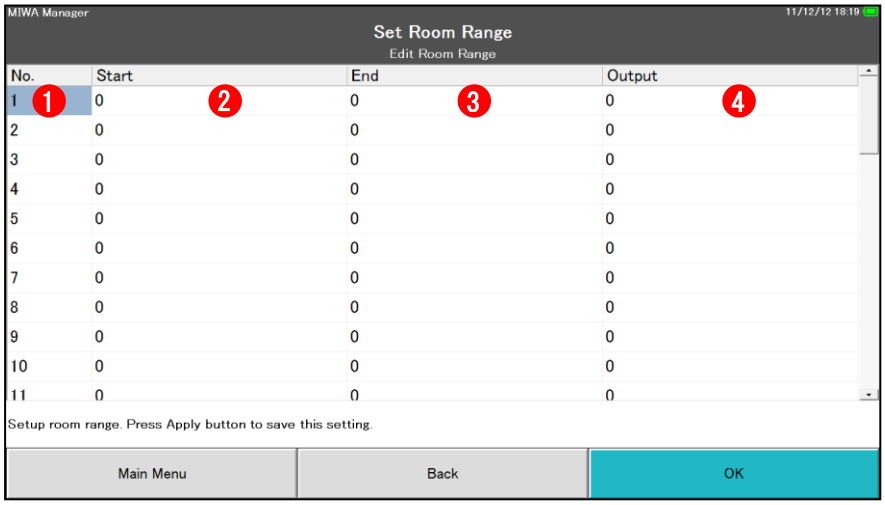
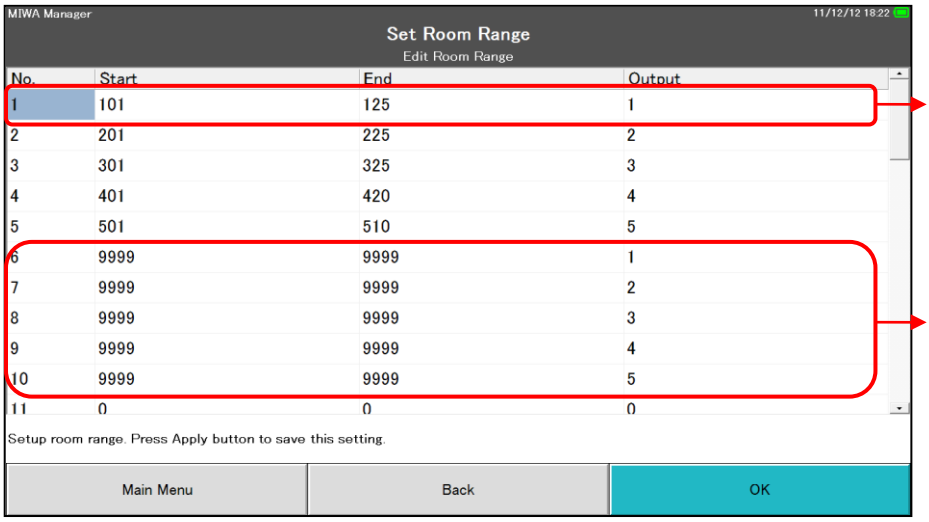
Set the room ranges.



❶ Group number
❷ Start room number of the room range
❸ End room number of the room range
❹ The contact number of the controller output when a card within this room range is used.

The following shows a setting example.



The contact number "1" of the controller is output if one of the cards for the room numbers 101 to 125 is used.

The contact numbers "1" to "5" of the controller are output if the card for the room number 9999 is used.

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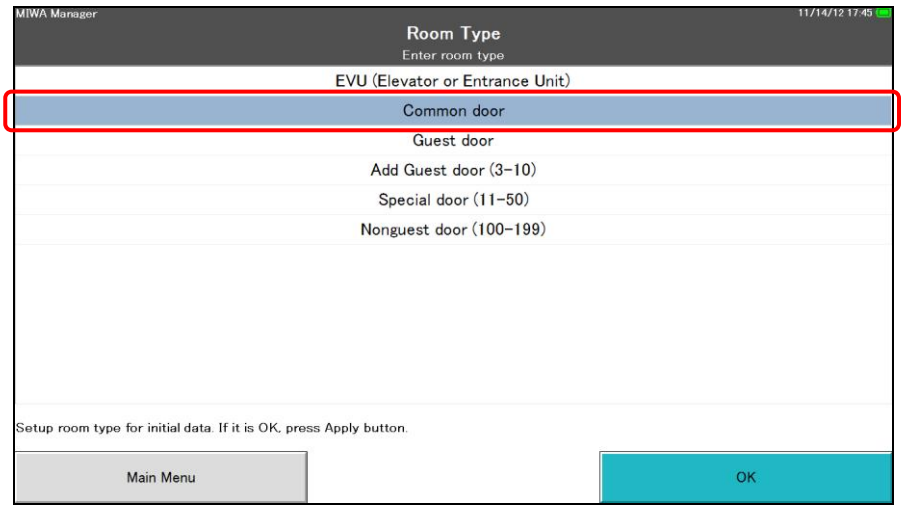
Supplement Common Door (Card Lock) Room Range Setting

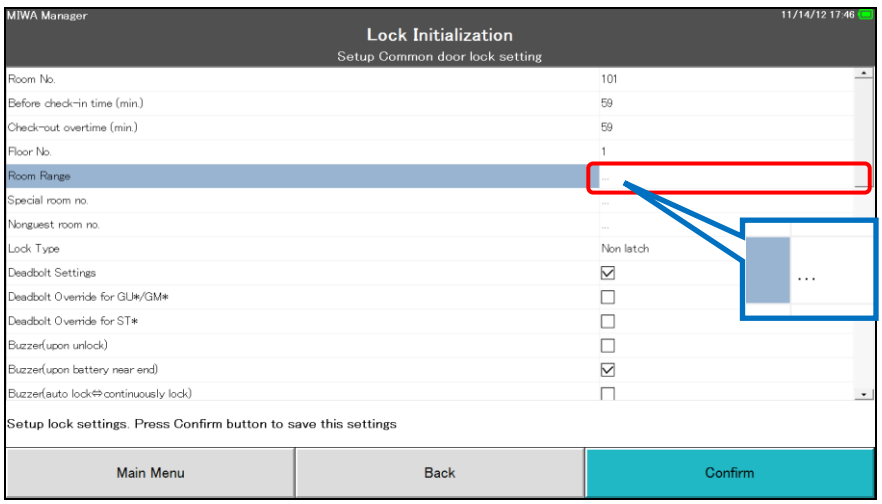
For "Common door", you can set a room range of which cards can be used for unlocking the common door. The procedure is as follows:

Choose "Common door".



The following Lock Initialization screen appears.

Choose "..." at the right of "Room Range".



The following Set Room Range screen appears.

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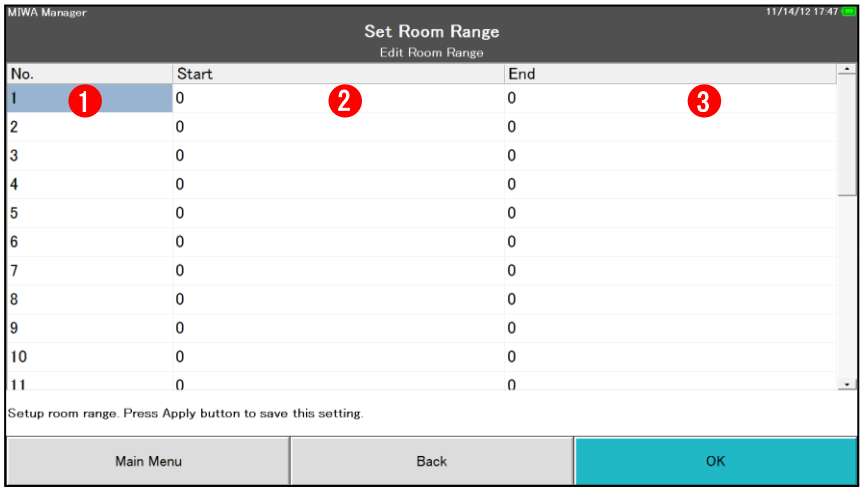
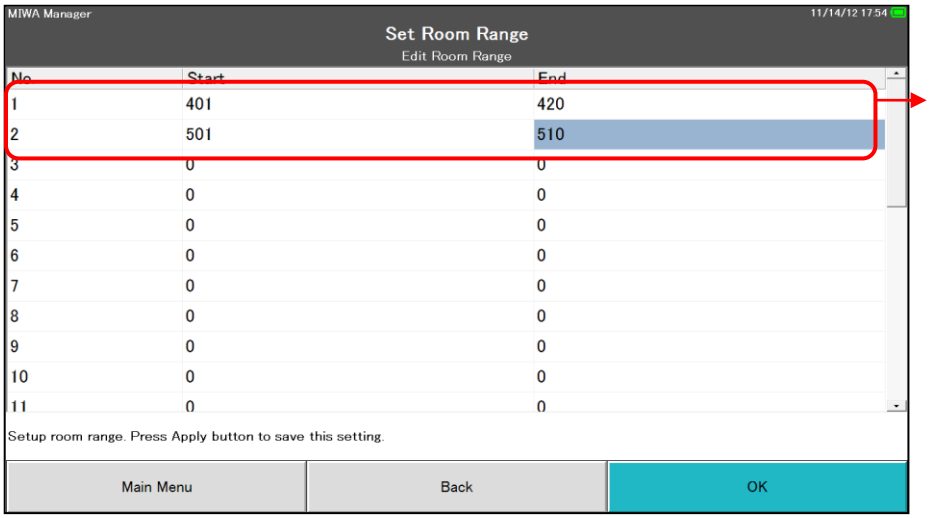
Set the room ranges.



❶ Group number
❷ Start room number of the room range
❸ End room number of the room range

The following shows a setting example.



The cards for the room numbers 401 to 420 (4F) and 501 to 510 (5F) can be used to unlock the common door.

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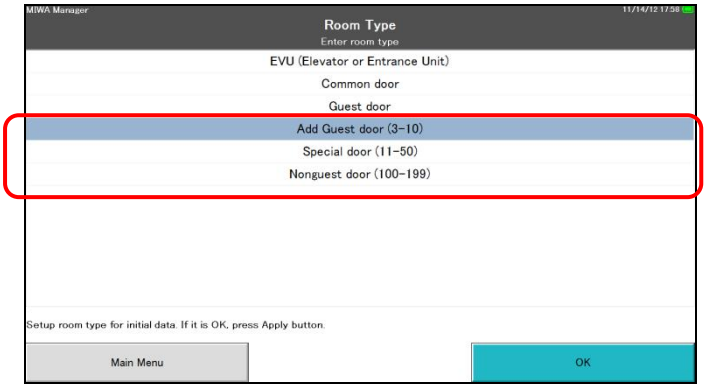
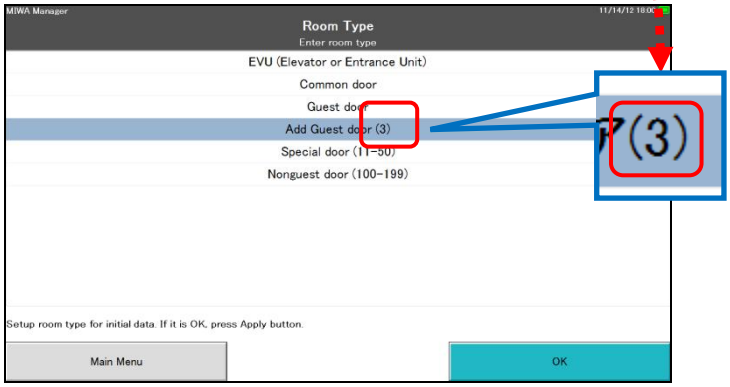
Supplement Room Type Number Specification

When you select "Add guest door", "Special door", or "Nonguest door", you can specify the room type number.



For example, if you choose "Add Guest door (3-10)", the following screen appears and you can specify a number within the range from 3 to 10.

After specifying the number, you will be returned to the Room Type screen and the number you entered will be shown as follows:



For the procedure after clicking the "Confirm" button with the room type number selected, refer to "2.3.Data Exchange with Card Lock".

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4. Clear Sequence

Use this menu to clear the sequence stored on each card lock, in case a sequence error occurred and the card cannot be used for unlocking.

Tip What is a “sequence”?

The sequence gives each card a priority. When two cards collide, the one with the greater sequence number takes precedence.

Tip What is “sequence error”?

An error which occurs when a card with a smaller sequence number than that of another card already in use.

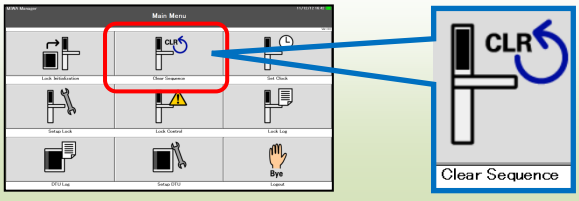
Purpose Clear the sequence stored on each card lock

Tip After clearing the sequence, any card with any sequence number can be used. The sequence number of the card used is recorded in the card lock.

Warning After clearing the sequence, be sure to use all valid cards issued recently, in order to prevent a card lost in the past from being used.

1 Display the Set Clock screen. 1/2

Operation Click the Clear Sequence button on the main menu.



The Clear Sequence screen shown on the next page appears.

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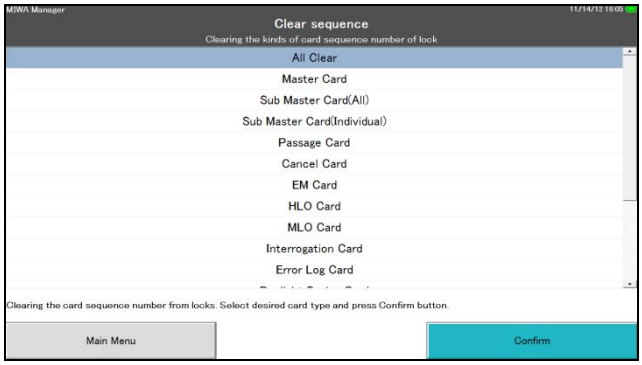
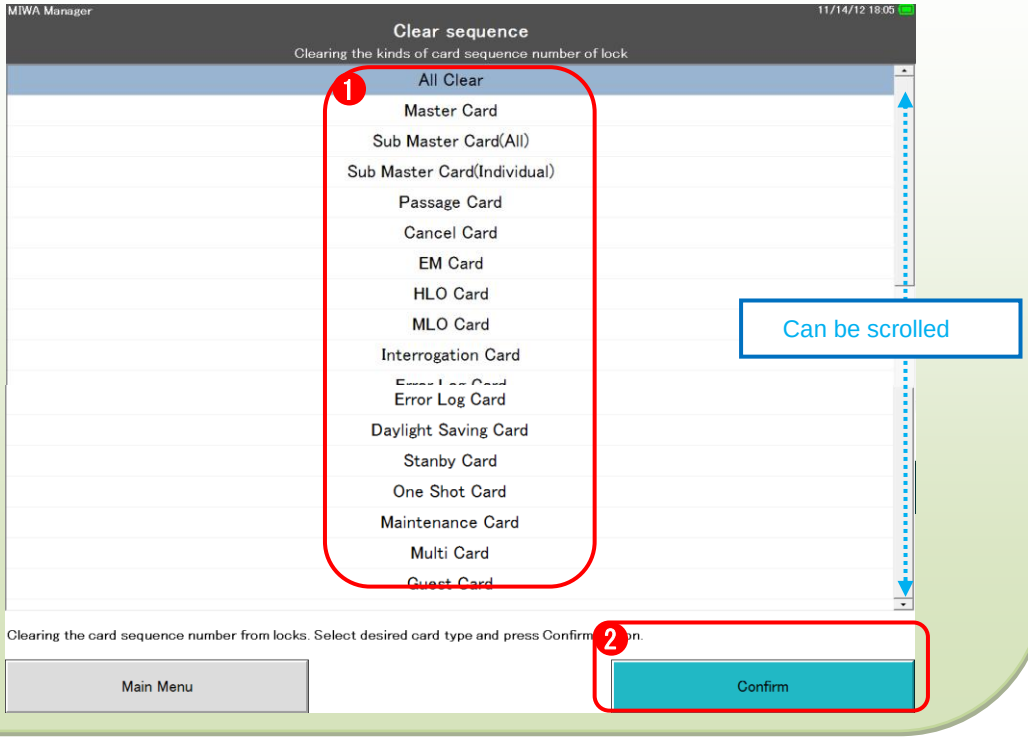


2 Choose a card to clear the sequence. 2/2

Operation

1. Choose a card to clear the sequence.
2. Click the "Confirm" button.



For the procedure after clicking the "Confirm" button, refer to "2.3.Data Exchange with Card Lock".

If you select "Sub Master Card (Individual)", the Sub Master Level screen appears. Refer to the Supplement on the next page.

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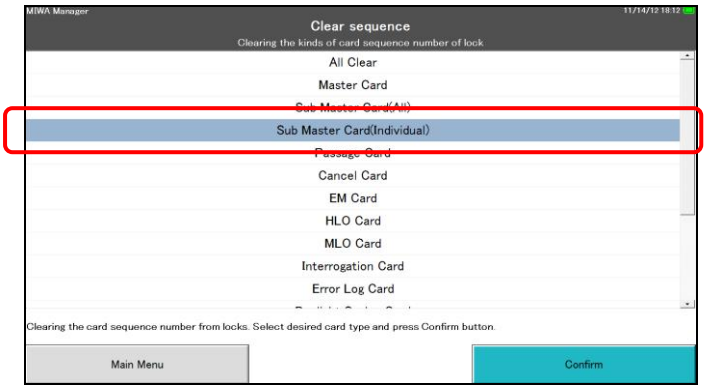
Supplement **When** "Sub Master Card (Individual)" is selected

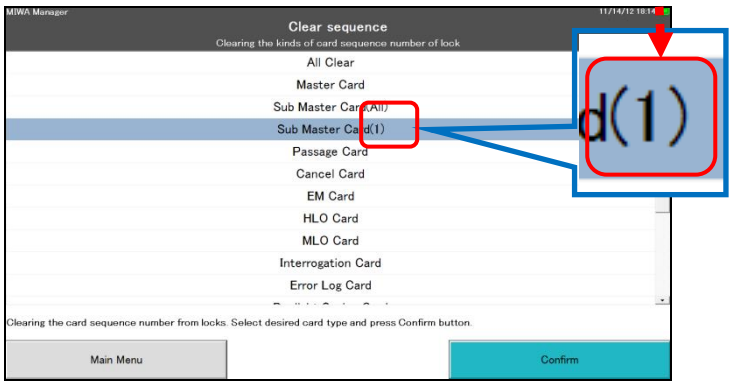
If you select "Sub Master Card (Individual)", the following Sub Master Level screen appears.



Enter the sub master level (1 to 500) and press the "Enter" button.

Confirmation If you are not sure with the sub master level, check for it on the "Set Sub Master" screen in the PC Server software.

You will be returned to the Clear Sequence screen and see the entered sub master level as shown below.



For the procedure after clicking the "Confirm" button with the sub master level selected, refer to "2.3.Data Exchange with Card Lock".

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5. Set Clock

Send the time maintained by the DTU software to the card lock or entrance/elevator reader to adjust the time..

Warning The time stored in the card lock may become incorrect over time. To prevent severe impact on security, use "Set Clock" at least once a year.

Warning If the time stored in the card lock is incorrect:

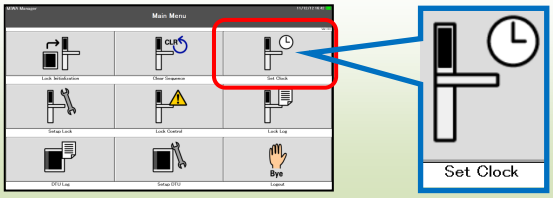
- A card within the valid term may not be used for unlocking.
- A card out of the valid term may be used for unlocking.

Purpose Adjust the time stored in the card lock to the time maintained by the DTU software.

Check if the time of the DTU software is correct on the Set Clock screen, and then send the time to the card lock.

1 Display the Set Clock screen. 1/2

Operation Click the "Set Clock" button on the main menu.



The Set Clock screen shown on the next page appears.

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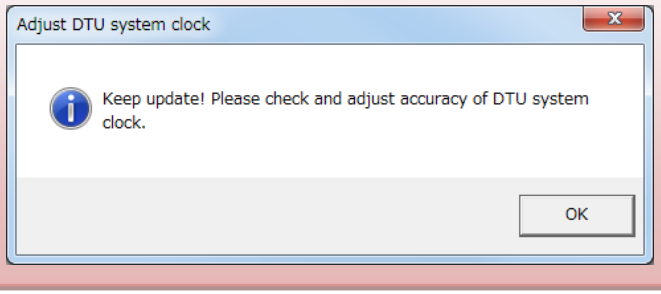
Confirmation

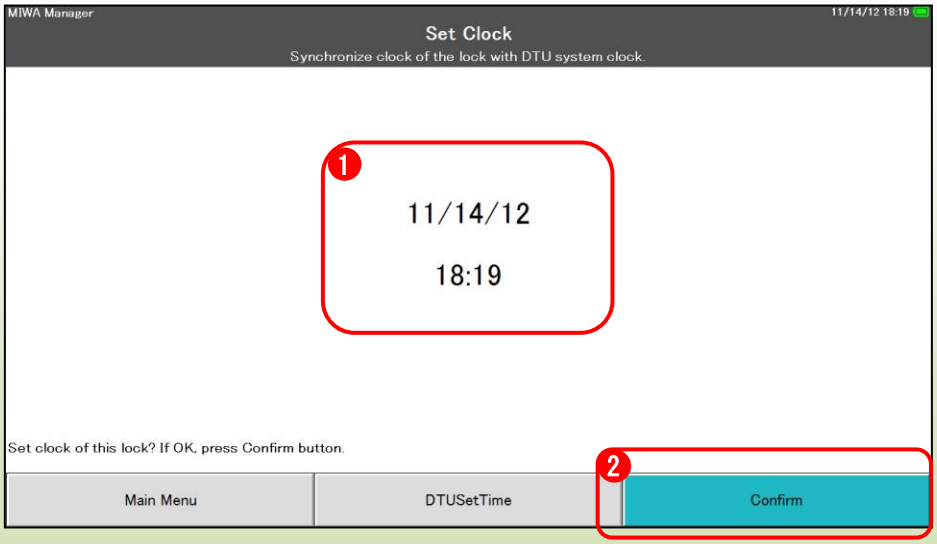
When you select this menu for the first time in a day, the Adjust DTU system clock dialog box may appear. If this is the case, refer to "2.4. Adjusting DTU Time" and adjust the system clock.



2 Check if the time of the DTU software is correct. 2/2

Operation

1. Check if the time of the DTU software is correct.
2. If it is correct, click the "Confirm" button.



For the procedure after clicking the "Confirm" button, refer to "2.3.Data Exchange with Card Lock".

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6. Setup Lock

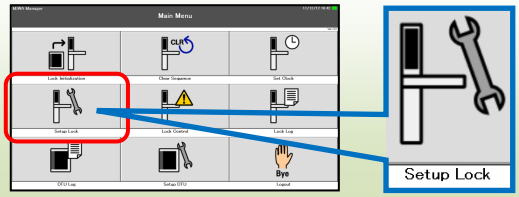
Edit the configuration data of the card lock and entrance/elevator reader. You can change the room number for the card lock and add a card which can be used by the entrance/elevator reader.

Purpose Edit the configuration data of the card lock.

Retrieve the current configuration data from the card lock, edit the data, and then send the edited data to the card lock.

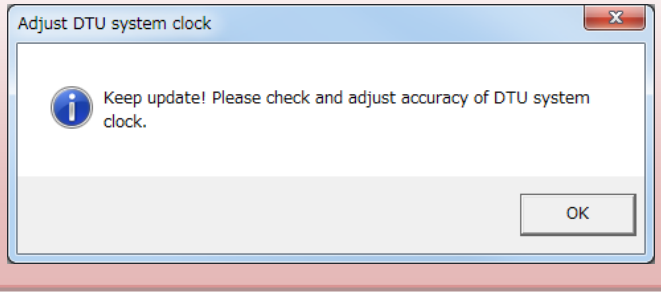
1 Display the Setup Lock screen. 1/2

Operation Click the "Setup Lock" button on the main menu.



After clicking "Setup Lock", refer to "2.3.Data Exchange with Card Lock" and retrieve data from the card lock.

Confirmation When you select this menu for the first time in a day, the Adjust DTU system clock dialog box may appear. If this is the case, refer to "2.4. Adjusting DTU Time" and adjust the system clock.



When the data has been retrieved from the card lock the screen shown on the next page appears.

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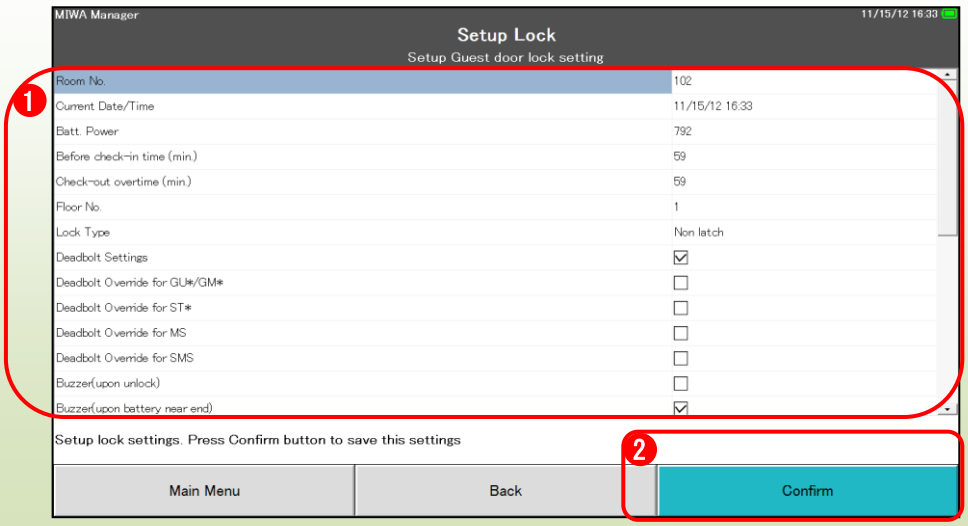
2 Edit the obtained data. 2/2

For the details of the items, refer to "Appendix: Details of Lock Initialization Values".

Operation

1. Edit the data obtained from the card lock.
2. Click the "Confirm" button.



After clicking "Setup Lock", refer to "2.3.Data Exchange with Card Lock" and send data to the card lock.

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7. Lock Control

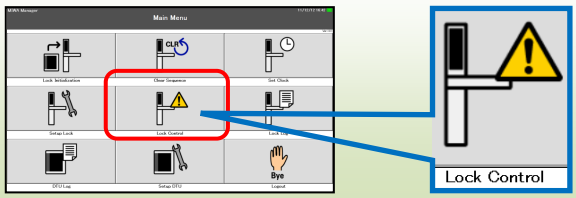
Send a control signal from the DTU software to change the card lock status.

Purpose Change the card lock status.

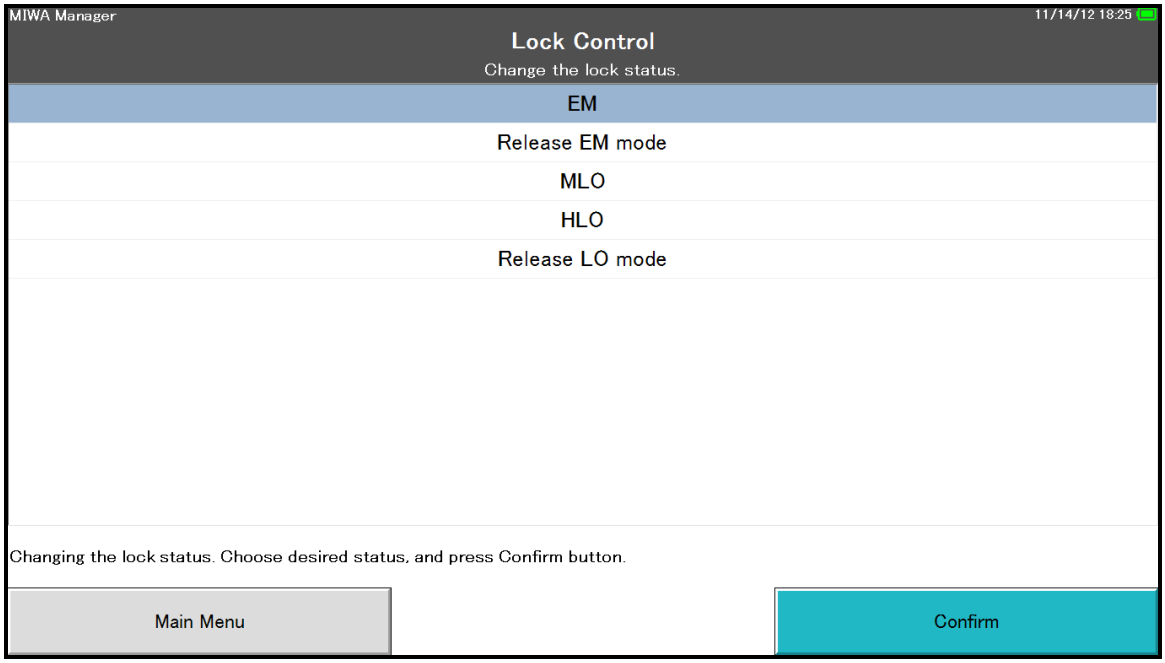
Choose what to change on the Lock Control screen and then send the control signal to the card lock.

1 Display the Set Clock screen. 1/2

Operation Click the "Lock Control" button on the main menu.



The following Lock Control screen appears.



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2 Choose what to send to the card lock. 2/2

- **EM**

  Emergency: Forcibly unlocks the door (continuous unlocking mode).

- **Release EM mode**

  Emergency release: Release the emergency status (automatic locking mode).

Confirmation

While the card lock is in the EM mode, you do not need to place the DTU over it for unlocking.

- **MLO**

  Master lock out: Inhibits use of the guest, MS, and SMS cards.

- **HLO**

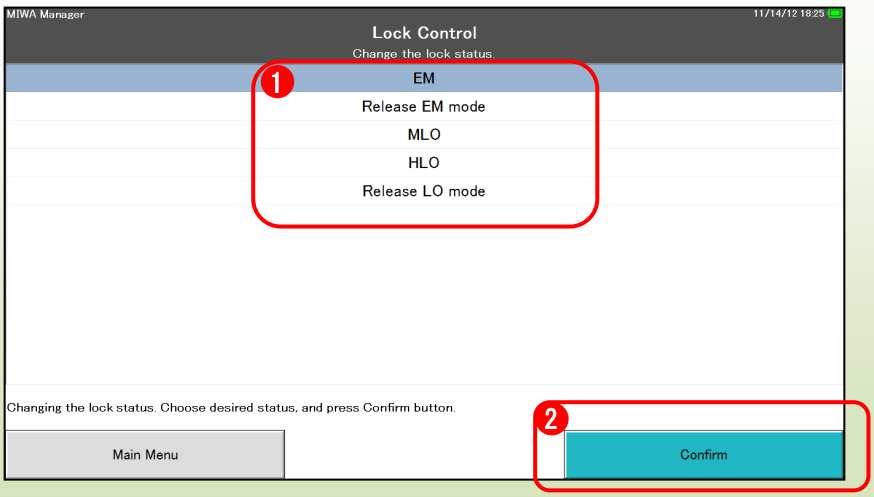
  Housekeeping lockout: Inhibits use of the guest card.

- **Release LO mode**

  Lockout release: Release the lockout (MLO and HLO) status.

Operation

1. Choose what to send to the card lock.
2. Click the "Confirm" button.



For the procedure after clicking the "Confirm" button, refer to "2.3.Data Exchange with Card Lock".

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8. Lock Log

For how to transfer the log to the PC Server software, please refer to "11. Synchronization with PC Server". For how to view the lock log in the PC Server software, please refer to "ALV2 PC Server Operation Manual for Windows".

Use this function to transfer the use log (the last 600 entries) and error log (last 100 entries) to the DTU.
You can store and view the retrieved data in the DTU software. You can also transfer the data from the DTU software to the PC Server software, and then store and view it on the PC Server software as well as output it in the CSV format.
Data for up to 20 rooms can be stored in the DTU software. When you store data for the 21st room, the oldest data will be overwritten.

The following page illustrates the flow for viewing the lock log.

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Lock Log Viewing Flow

1・ Transfer the lock log from the card lock.

Card lock

Infrared communication

Retrieve the lock log.

DTU software

2・ View, retrieve, and print the lock log.

DTU software

Print

3・ Transfer the lock log to the PC Server.

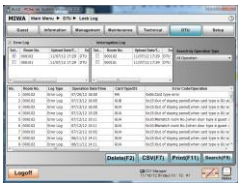
DTU software

LAN communication

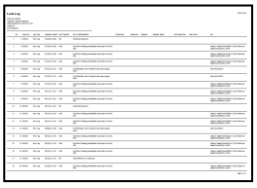
Send the lock log.

PC Server

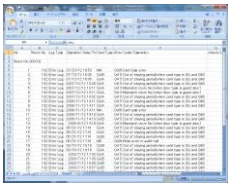
4・ View, retrieve, print, and output in the CSV format the lock log in the PC Server.



PC Server



Print



CSV output (e.g., in Excel)

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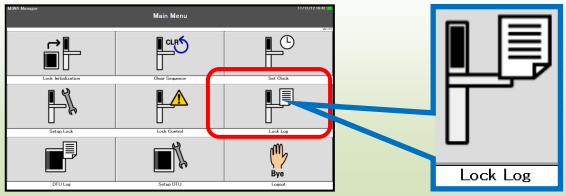
8.1. Retrieving, Viewing, and Deleting Lock Log

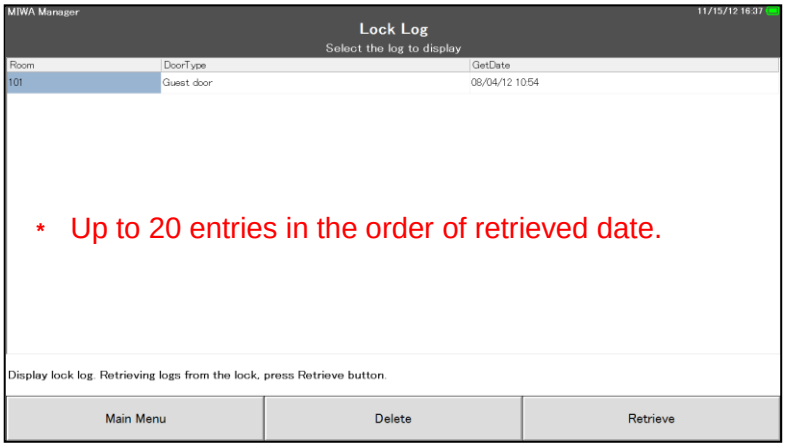
1 Display the Lock Log screen. 1/1

Operation

Click the "Lock Log" button on the main menu.



The following Lock Log screen appears.



* Up to 20 entries in the order of retrieved date.

From the Lock Log screen, you can:

- Retrieve the lock log from the card lock. -> Go to 8.1.1.
- View the lock log retrieved from the card lock. -> Go to 8.1.2.
- Narrow the lock log by specifying the search term.-> Go to 8.1.3.
- Print the lock log retrieved from the card lock. -> Go to 8.1.4.
- Delete the lock log. -> Go to 8.1.5.

The following sections describes the operations above.
For how to transfer the lock log to the PC Server, refer to "11. Synchronization with PC Server".

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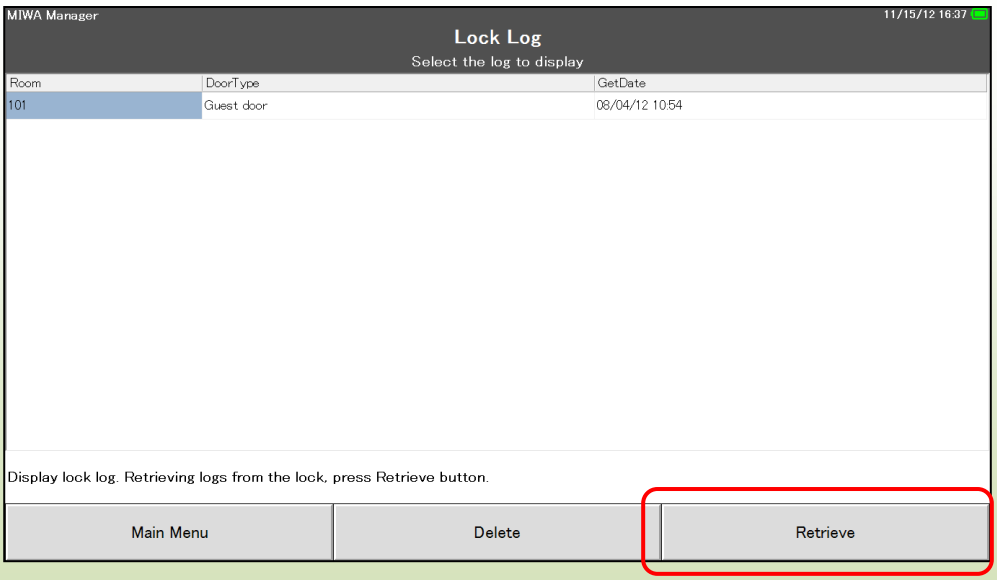
8.1.1. Retrieving Lock Log

Purpose Retrieve the lock log from the card lock.

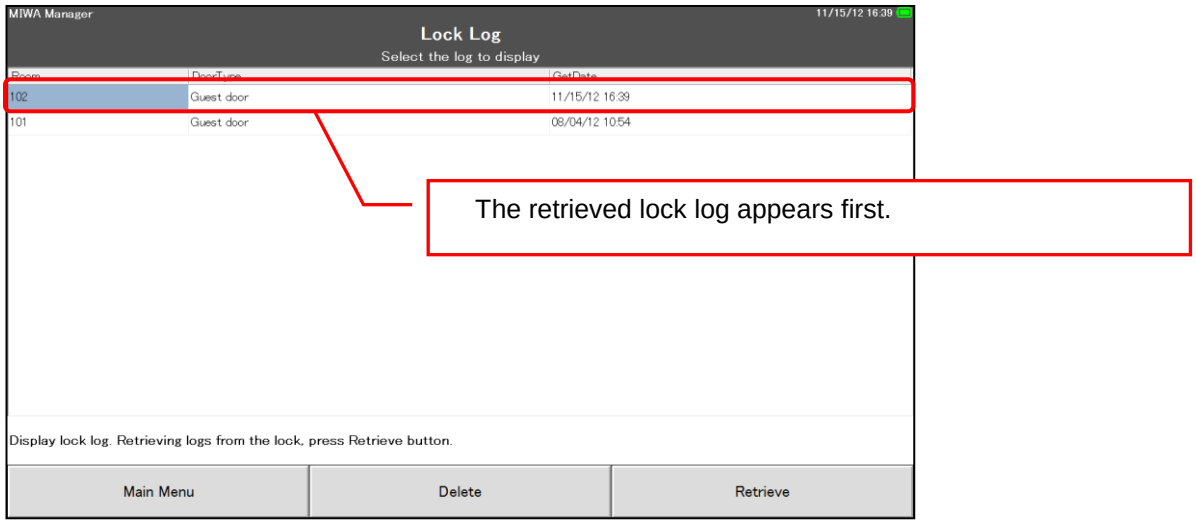
1 Retrieve the latest lock log from the card lock. **1/1**

Operation

Click the "Retrieve" button.



For the procedure after clicking the "Retrieve" button, refer to "2.3.Data Exchange with Card Lock". When the lock log has been retrieved successfully, the following screen appears.



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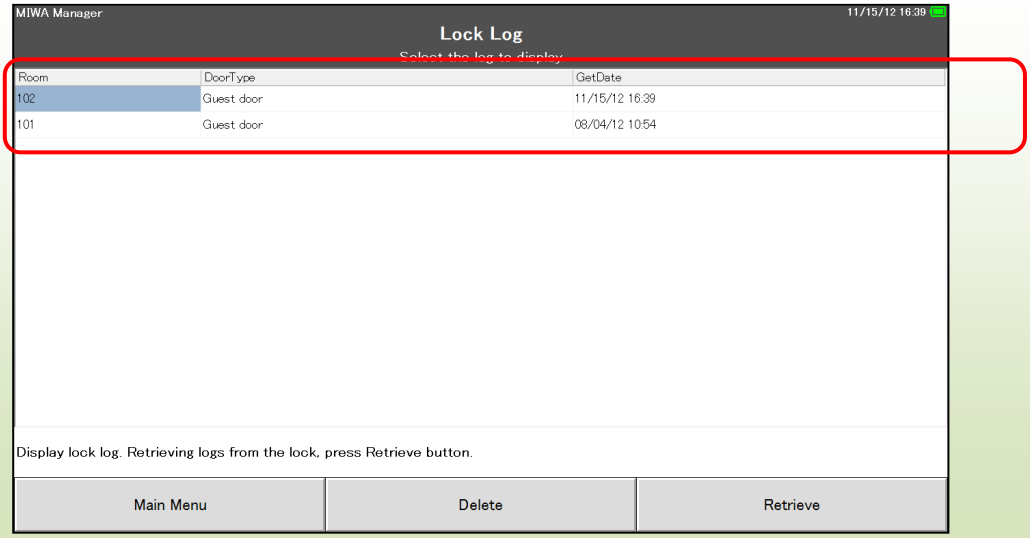
8.1.2. Viewing Lock Log

Purpose View the lock log retrieved from the card lock.

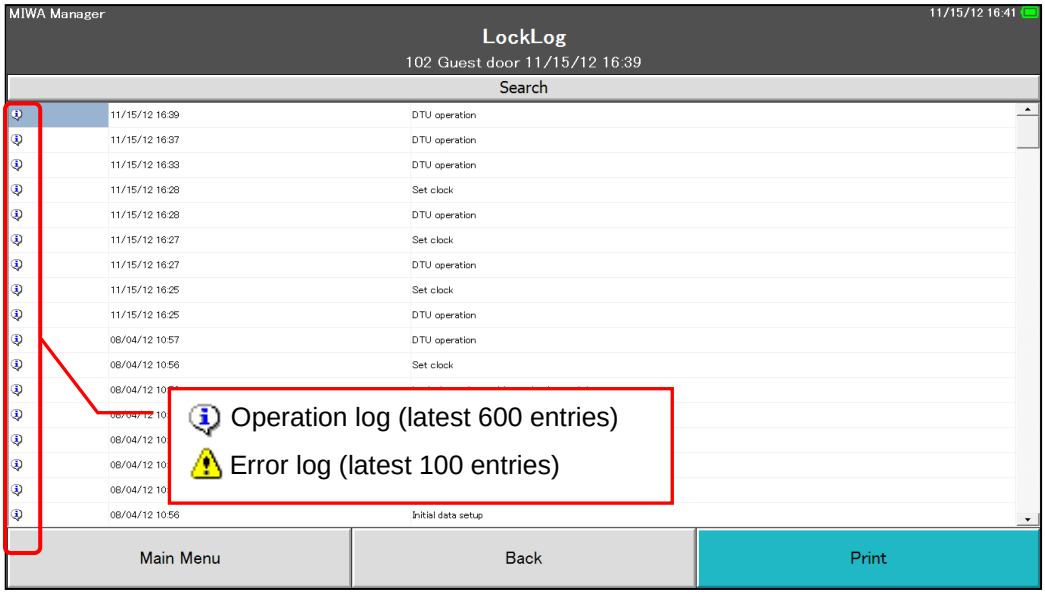
1 Choose a room to view the lock log. 1/3

Operation

Click a room to view the lock log in the list.



The lock log for the chosen room appears.



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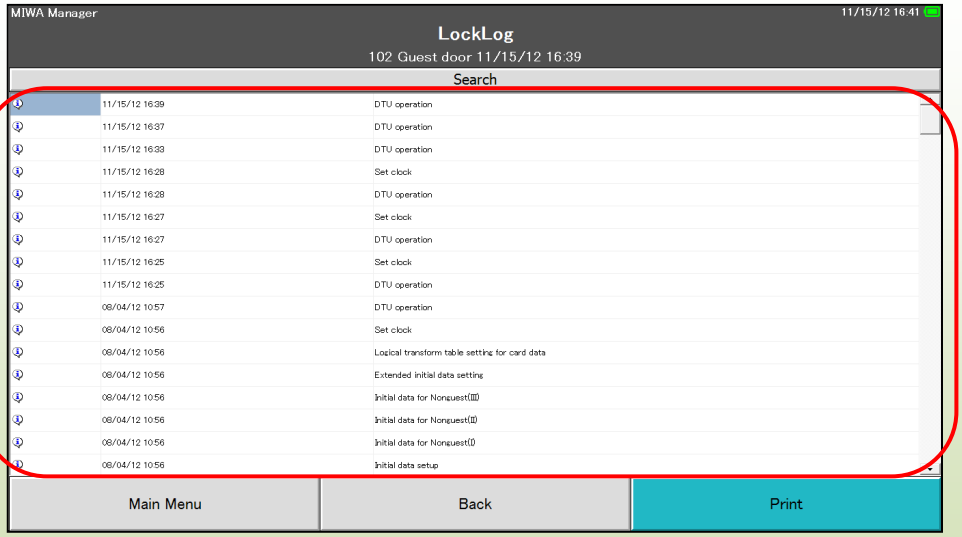
2 Display the details of the use log. 2/3

Operation

Click an entry to view the details.

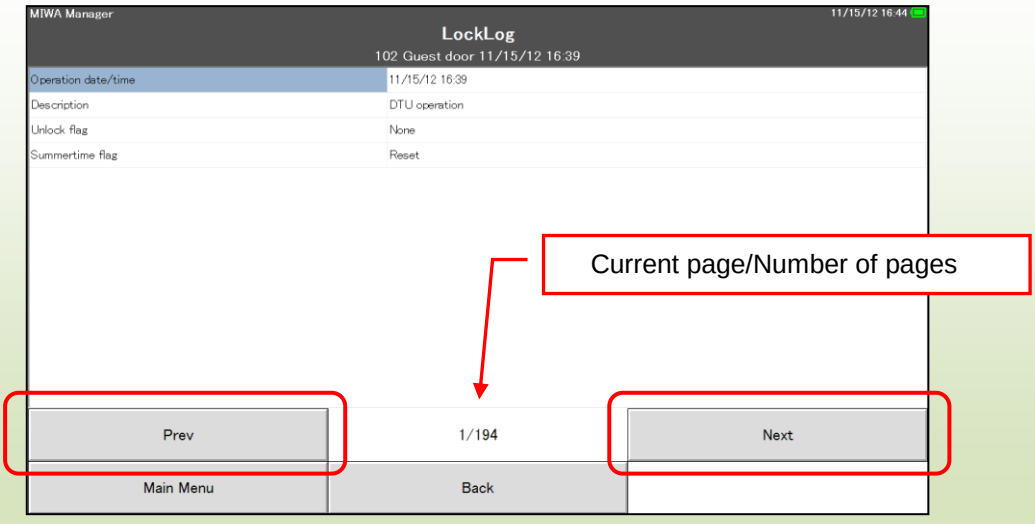


The details of the selected entry appear.

3 View the details. 3/3

Operation

Click the "Prev" and "Next" buttons to navigate through the details.



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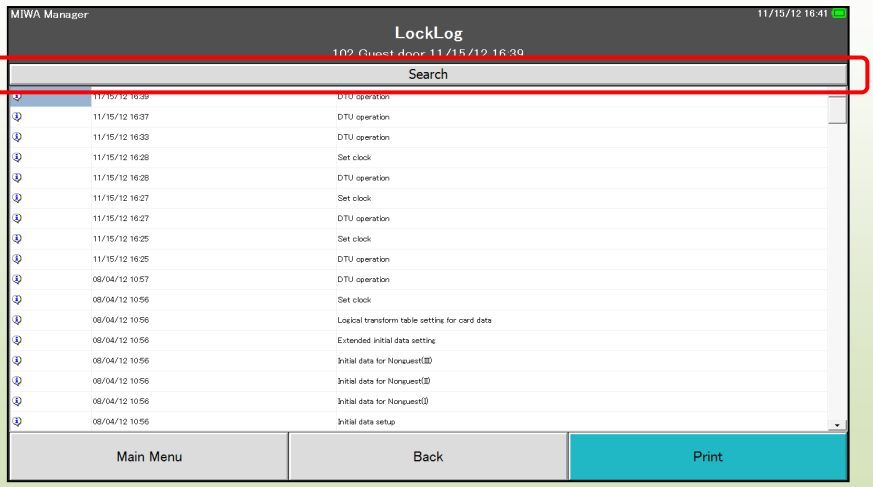
8.1.3. Narrowing Lock Log

Purpose Narrow the lock log by specifying the search term.

1 Select the search function. 1/2

Operation While the lock log list for the room to view is displayed, click "Search".



The screen shown on the next page appears.

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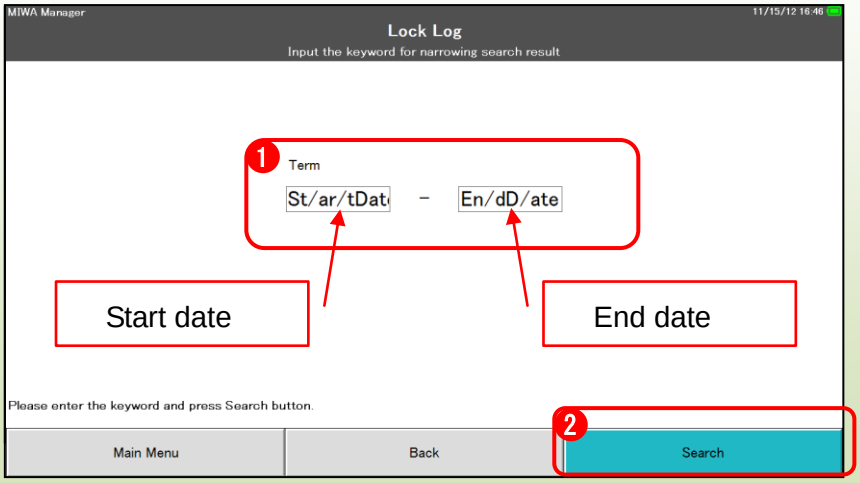
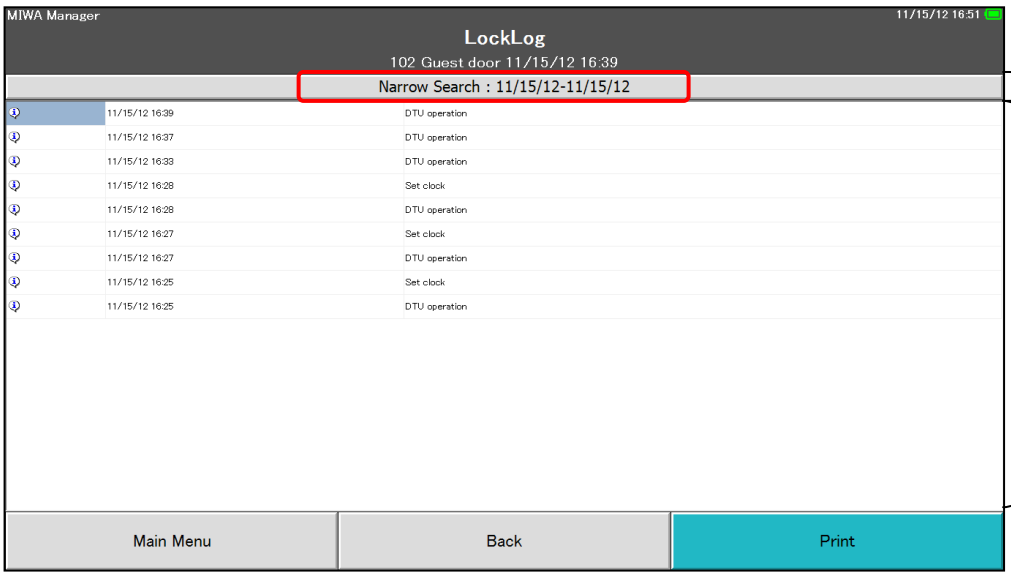
2 Specify the term. 2/2

Operation

1. Specify the start date and end date with the last two digits of the year (yy), month (mm), and day of the month (dd) in the format "yy/mm/dd".
2. Click the "Search" button.



The following Lock Log screen appears.



Search term is shown.

Entries are narrowed to the specified term.

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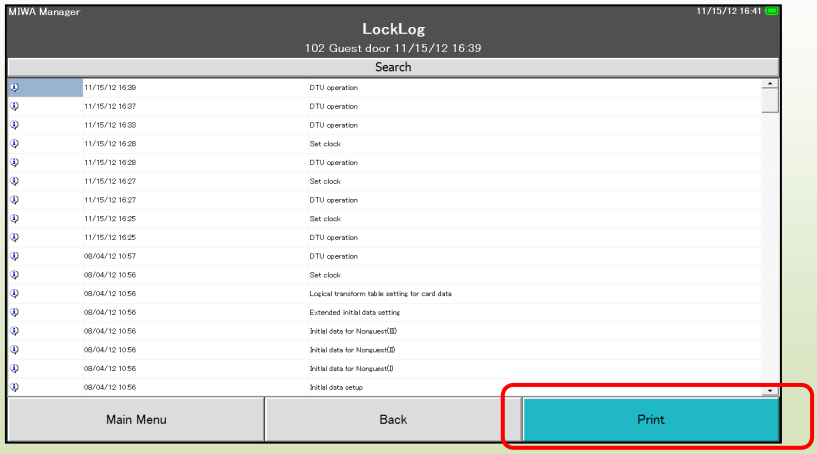
8.1.4. Printing Lock Log

Purpose Print the lock log retrieved from the card lock.

1 Start printing. 1/2

You can also print the narrowed lock log.

Operation While the lock log list for the room to print is displayed, click "Print".



The Print lock logs screen shown on the next page appears.

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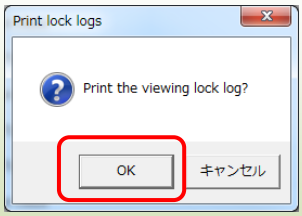
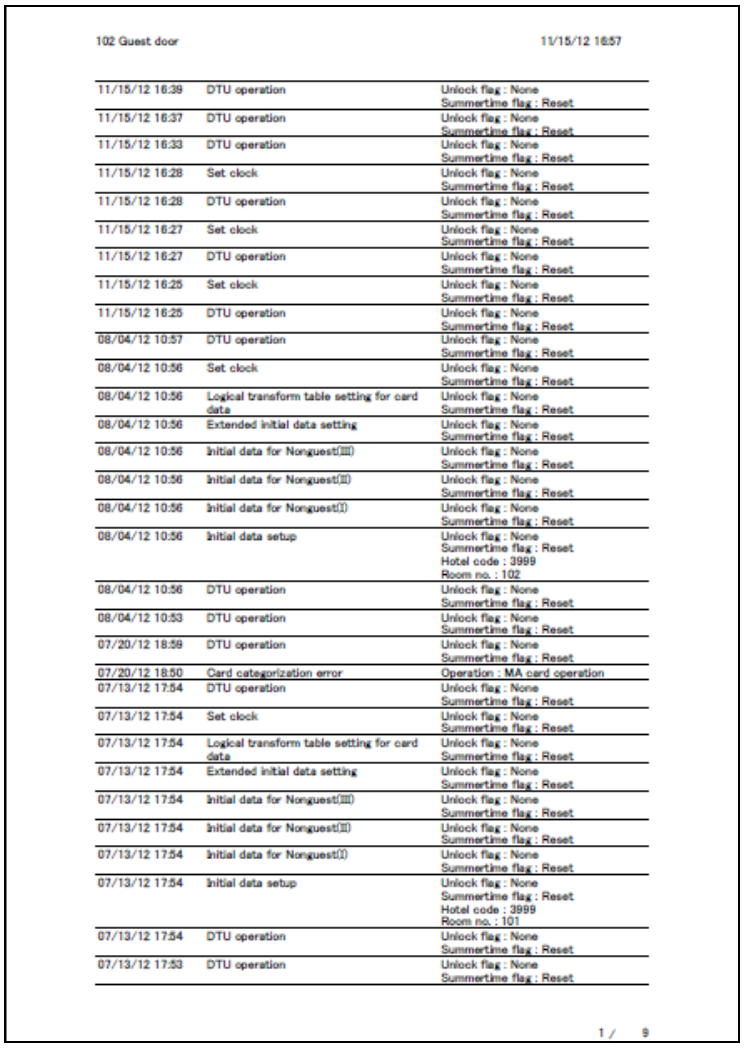
2 Confirm printing. 2/2

Operation

Click the "OK" button for confirmation.



The Print dialog box of Windows opens. Follow the standard procedure to run printing.



102 Guest door 11/15/12 16:57

11/15/12 16:39	DTU operation	Unlock flag : None Summertime flag : Reset
11/15/12 16:37	DTU operation	Unlock flag : None Summertime flag : Reset
11/15/12 16:33	DTU operation	Unlock flag : None Summertime flag : Reset
11/15/12 16:28	Set clock	Unlock flag : None Summertime flag : Reset
11/15/12 16:28	DTU operation	Unlock flag : None Summertime flag : Reset
11/15/12 16:27	Set clock	Unlock flag : None Summertime flag : Reset
11/15/12 16:27	DTU operation	Unlock flag : None Summertime flag : Reset
11/15/12 16:25	Set clock	Unlock flag : None Summertime flag : Reset
11/15/12 16:25	DTU operation	Unlock flag : None Summertime flag : Reset
08/04/12 10:57	DTU operation	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Set clock	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Logical transform table setting for card data	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Extended initial data setting	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Initial data for Nonguest(III)	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Initial data for Nonguest(II)	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Initial data for Nonguest(I)	Unlock flag : None Summertime flag : Reset
08/04/12 10:56	Initial data setup	Unlock flag : None Summertime flag : Reset Hotel code : 3999 Room no. : 102
08/04/12 10:56	DTU operation	Unlock flag : None Summertime flag : Reset
08/04/12 10:53	DTU operation	Unlock flag : None Summertime flag : Reset
07/20/12 18:59	DTU operation	Unlock flag : None Summertime flag : Reset
07/20/12 18:50	Card categorization error	Operation : MA card operation
07/13/12 17:54	DTU operation	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Set clock	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Logical transform table setting for card data	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Extended initial data setting	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Initial data for Nonguest(III)	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Initial data for Nonguest(II)	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Initial data for Nonguest(I)	Unlock flag : None Summertime flag : Reset
07/13/12 17:54	Initial data setup	Unlock flag : None Summertime flag : Reset Hotel code : 3999 Room no. : 101
07/13/12 17:54	DTU operation	Unlock flag : None Summertime flag : Reset
07/13/12 17:53	DTU operation	Unlock flag : None Summertime flag : Reset

1 / 9

* **This is just an example.**

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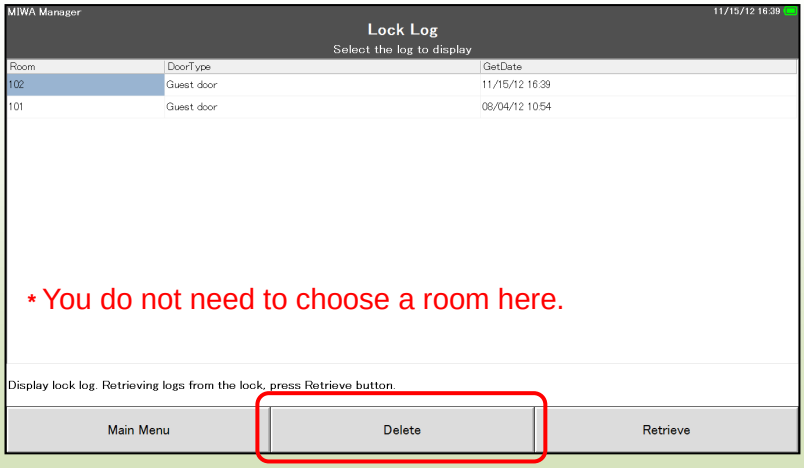
8.1.5. Deleting Lock Log

Purpose Delete the stored lock log.

1 Display the list of rooms. 1/3

Operation

Click the "Delete" button.

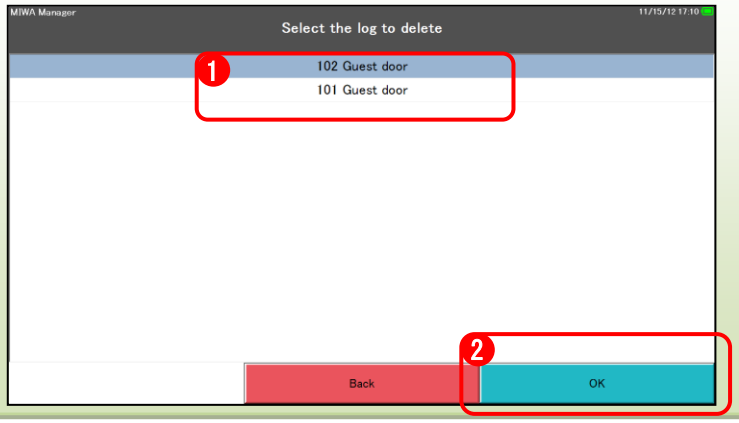


The next screen appears.

2 Choose a room (log) to delete. 2/3

Operation

1. Choose a log to delete from the list.
2. Click the "OK" button.



The Erase lock logs screen appears.

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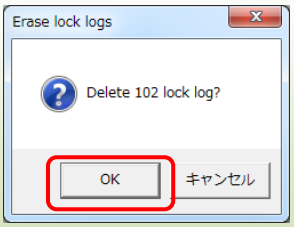
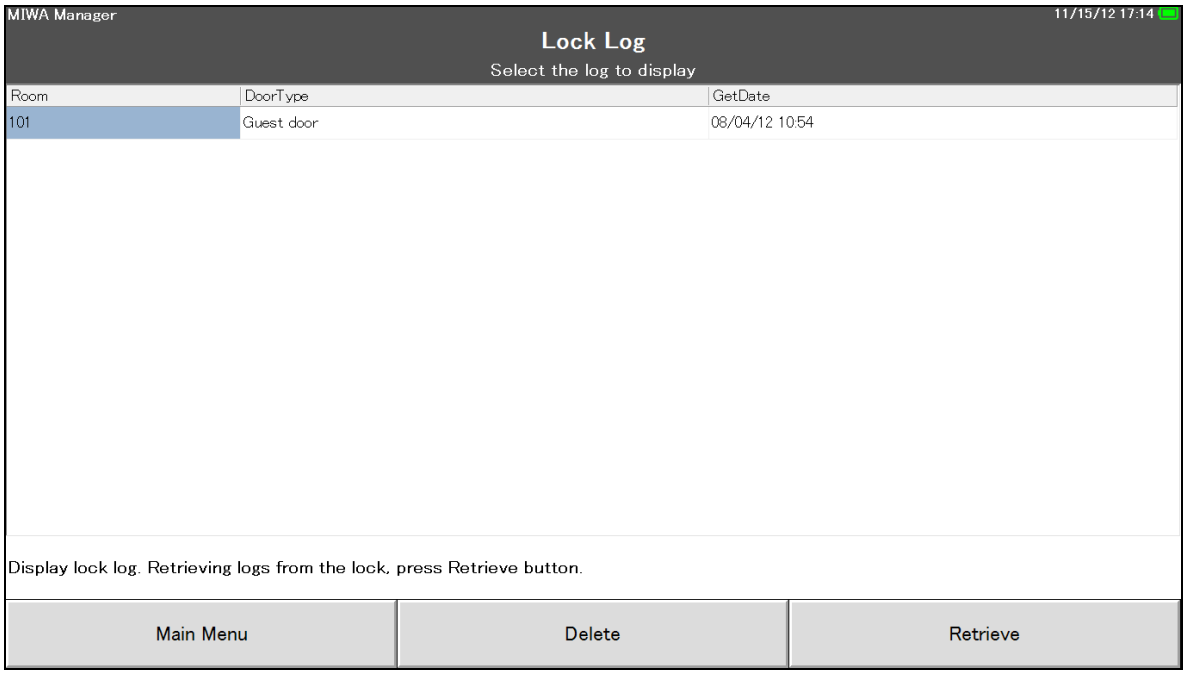
3 Confirm deletion. 3/3

Operation

Click the "OK" button for confirmation.



You will be returned to the Lock Log screen.



Confirmation

Deleting the lock log on this screen does not delete the log stored in the card lock.

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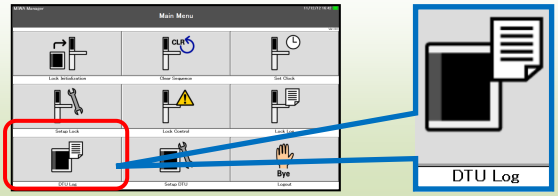
9. DTU Log

Display the latest 500 entries of the operation log of the DTU software.

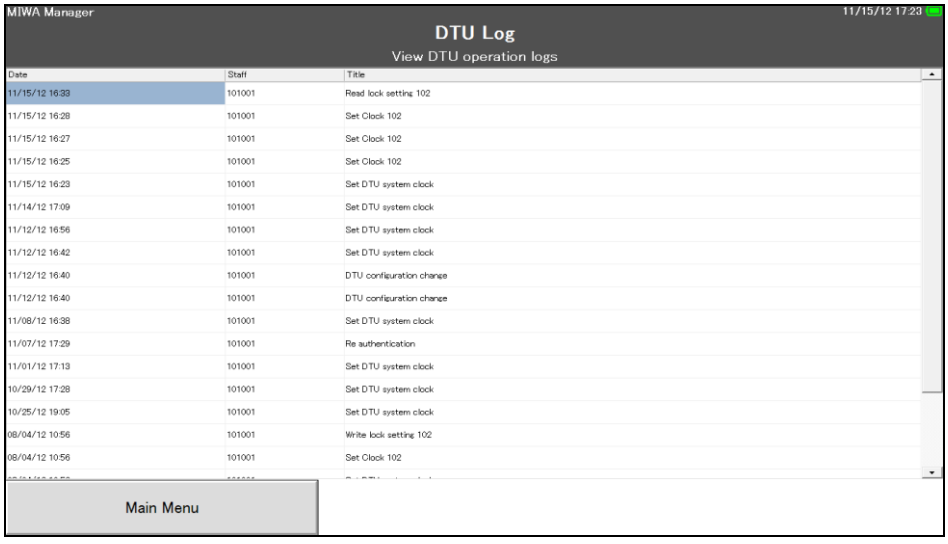
Purpose Display the operation log of the DTU software.

1 Display the DTU Log screen. 1/1

Operation Click the "DTU Log" button on the main menu.



The following DTU Log screen appears. Entries are sorted in the descending order of the date.



- Date : Operation date
- Staff : Staff (login) code involved in the operation
- Title : Operation details

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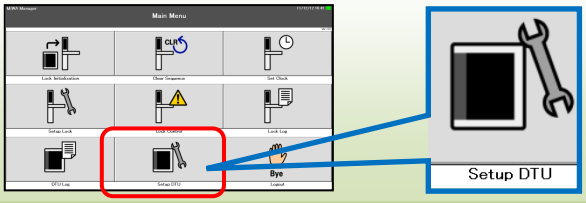
10.Setup DTU

Change the DTU software settings and/or transfer the lock log to the PC Server.

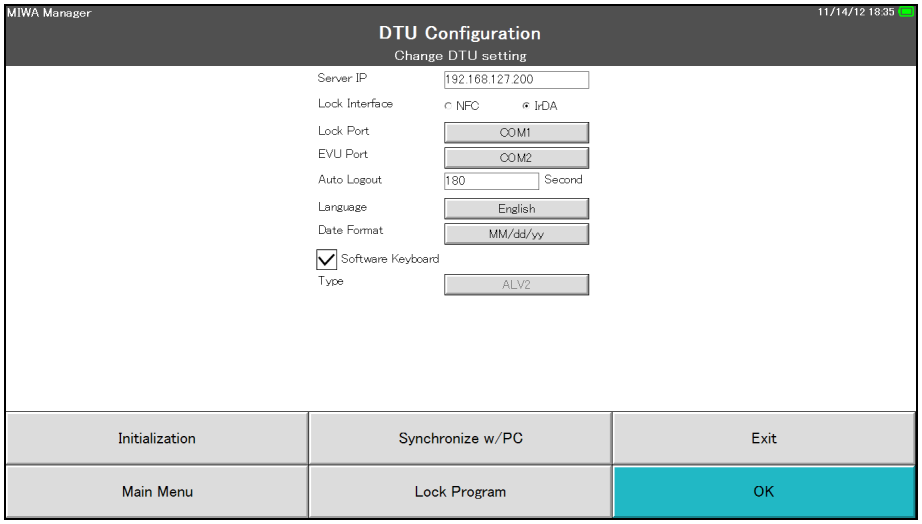
Purpose Change the DTU software settings.

1 Display the Setup DTU screen. 1/3

Operation Click the "Setup DTU" button on the main menu.



The following DTU Configuration screen appears.



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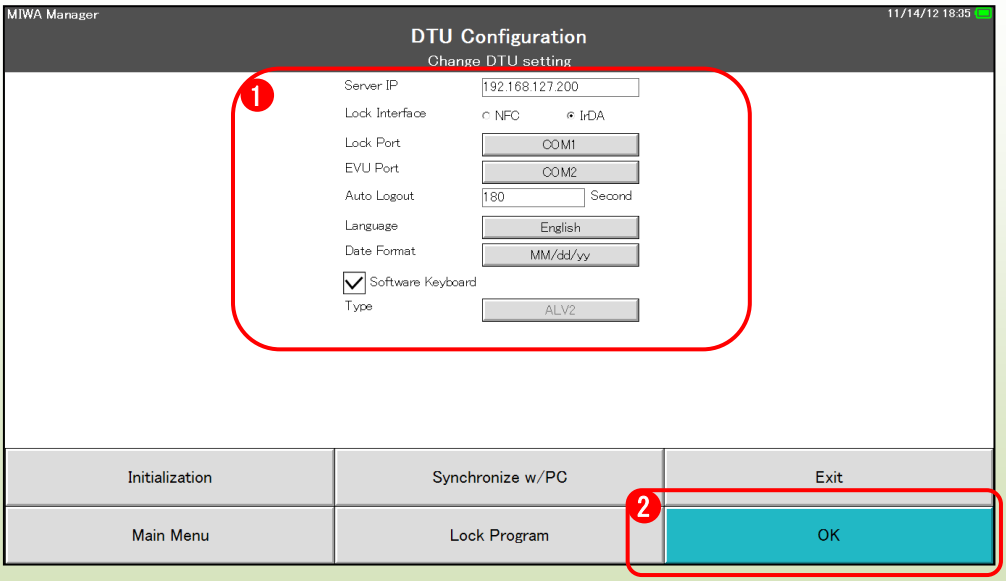
2 Change the DTU settings. 2/3

Operation

❶ Change the settings as necessary.
❷ Click the "OK" button.



Confirmation

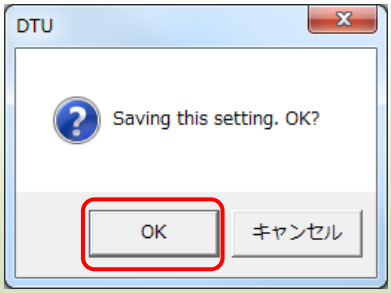
For the details of each item, refer to "ALV2 Setup Manual for Windows".

The following confirmation message appears.

3 Save changes. 3/3

Operation

Click the "OK" button for the following message.



The new settings are saved.

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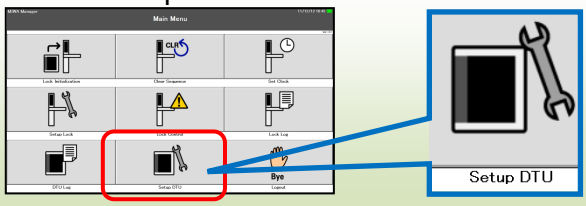
11. Synchronization with PC Server

Synchronize with the PC Server to retrieve the configuration data and/or transfer the lock log. Perform synchronization as described below.

Purpose Retrieve the configuration data from and/or transfer the lock log to the PC Server software.

1 Display the Setup DTU screen. 1/5

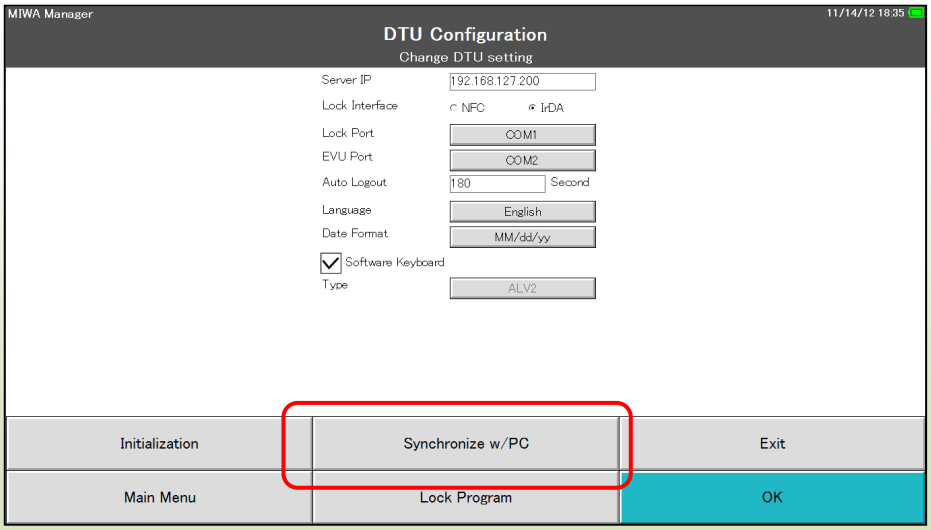
Operation Click the "Setup DTU" button on the main menu.



The following DTU Configuration screen appears.

2 Display the Synchronization with PC Server screen. 2/5

Operation Click "Synchronize w/PC Server".



The following Synchronize w/PC Server screen appears.

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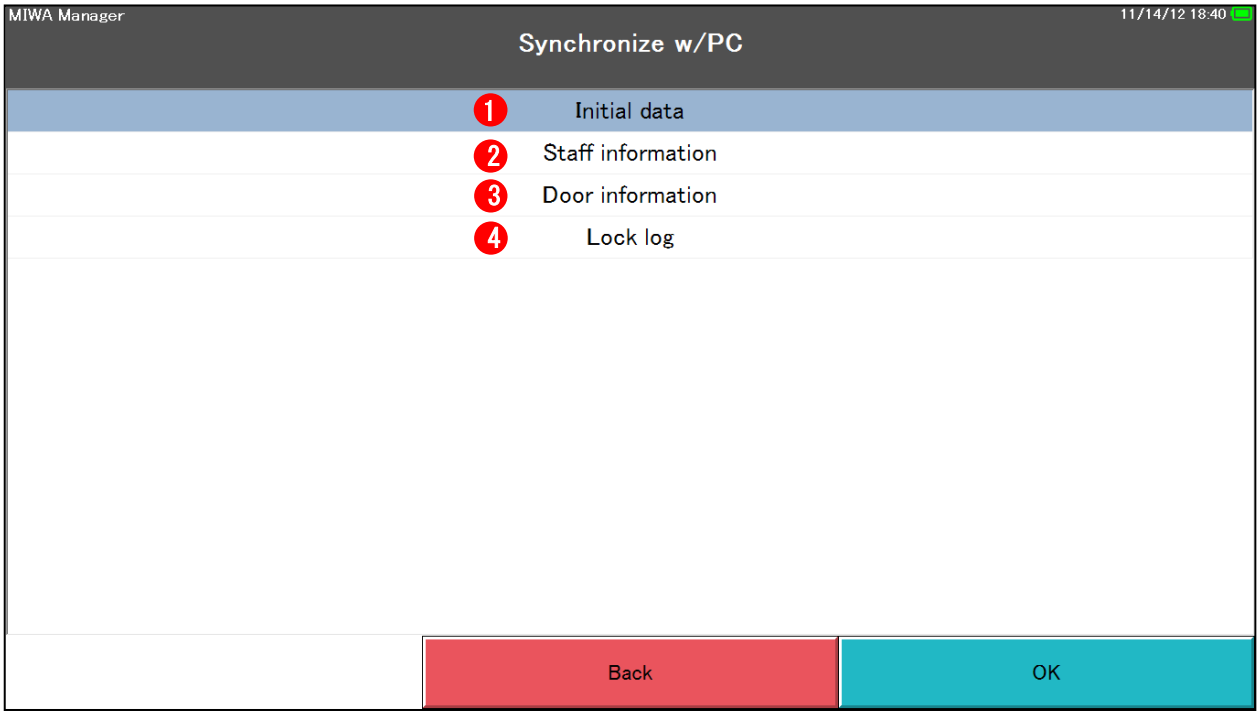

The table below explains each item.

No.	Button name	Description
1	Initial data	Retrieves the DTU initial data from the PC Server software.
2	Staff information	Retrieves the staff information from the PC Server software.
3	Door information	Retrieves the staff information (hotel code, non-guest room names, special room names, etc.) from the PC Server software.
4	Lock log	Transfers the lock log to the PC Server software. * The operation procedure is shown from the next page.

Warning

Information updated on the PC Server software after synchronization can be retrieved by performing synchronization again. For example, staff information added to the PC Server software after synchronization will not be reflected on the DTU software until you synchronize it with the PC Server again.

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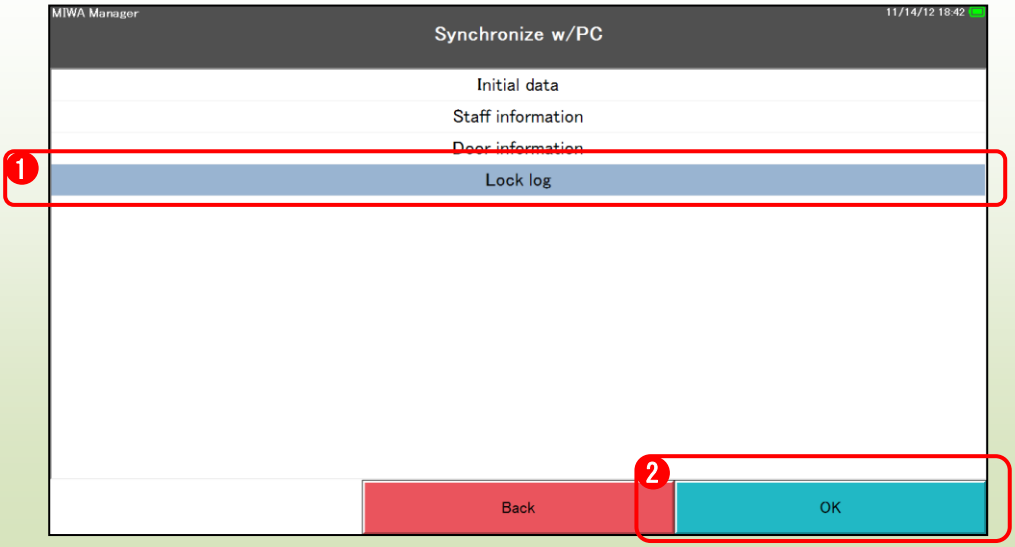
3 Choose an item for synchronization. 3/5

Operation

1. Choose "Lock log".
2. Click the "OK" button.

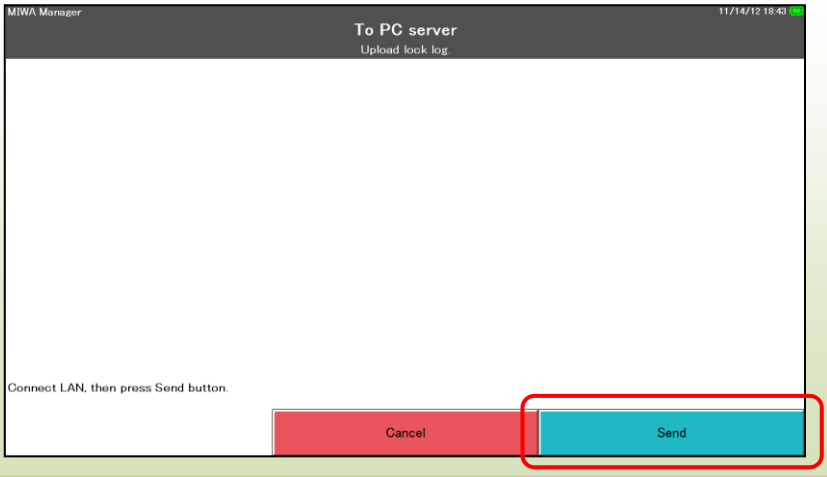


The following To PC server screen appears.

4 Transfer the lock log the PC Server. 4/5

Operation

Click the "Send" button.



When transfer completes, the following confirmation dialog box appears.

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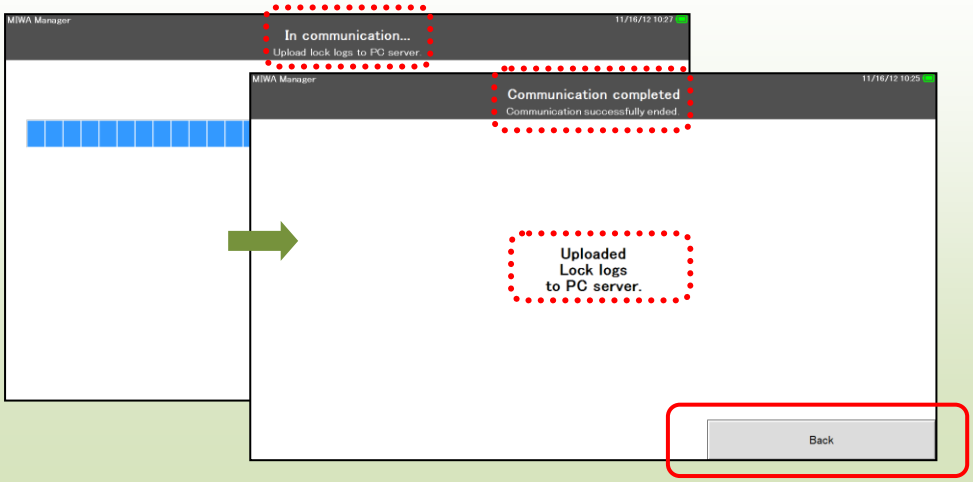
5 Confirm transfer. 5/5

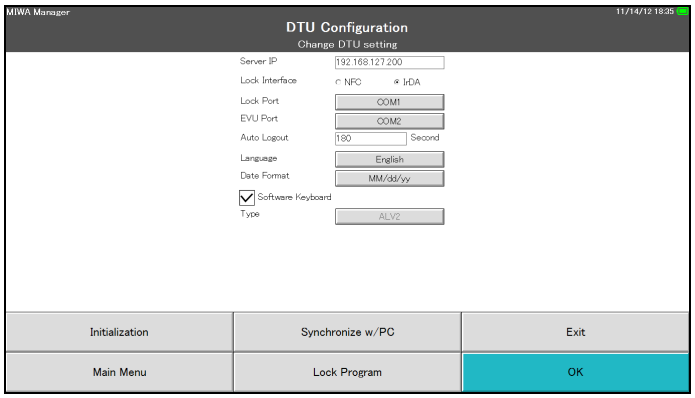
When data communication completes successfully, the header of the dialog box changes from "In communication …" to "Communication completed.

Operation

When the message "Uploaded Lock logs to PC server." appears, click the "Back" button.



When the DTU Configuration screen appears, transfer of the lock log is completed.



For how to view the lock log in the PC Server software, refer to "ALV2 PC Server Operation Manual for Windows".

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Appendix: Details of Lock Initialization Values

・EVU

Item	Default value	Range	Description
Room No.	101	000001 - 999999	Card reader number.
Before check-in time (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes before the valid term start time the guest card can be used for.
Check-out overtime (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes after the valid term end time the guest card can be used for.
Room Range		Start: 0 - 999999 End: 0 - 999999 Output: 1 - 40	Registers up to 40 room ranges (No.1 - 40), and specifies the contact output number for each of the registered room range numbers.
Special Room No.		No.11 - 50 Output: 1 - 40	Selects a number to be valid from the door information (special room numbers 11 - 50) retrieved from the PC Server software.
Buzzer (upon unlock)	No (unchecked)	Yes/No	Specifies whether or not the buzzer should sound upon unlocking.
Buzzer (upon battery near end)	N/A		
Buzzer (auto lock ⇔ continuously lock)	N/A		
Unlock time	N/A		
Cylinder unlock key log	Recorded (checked)	Recorded/Not recorded	Operation log of mechanical key
Guest valid start time	00:00	00:00 - 23:59	Valid term start time of guest card
Guest valid end time	00:00	00:00 - 23:59	Valid term end time of guest card

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Item	Default value	Range	Description
Guest valid day of the week (Sun)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Mon)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Tue)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Wed)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Thurs)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (FRI)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week Sat	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Auto time zone	N/A	Start: 00:00 - 23:59 End: 00:00 - 23:59 Output: 1 - 40	Continuously outputs the specified contact number for the specified time zone. (Up to four patterns)
Contact output time	1	1 - 59 (sec.)	Contact output time from controller
EM Unlock time	0	0 - 99 (sec.)	Contact output time when emergency card is used * Continuously output when set to 0.
Card detection threshold	0	0 - 20	Adjustment of card detection level (default=0) * Should not be changed in normal situation.

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・ Common door

Item	Default value	Range	Description
Room No.	101	000001 - 999999	Room number for card lock
Before check-in time (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes before the valid term start time the guest card can be used for.
Check-out overtime (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes after the valid term end time the guest card can be used for.
Room floor	1	0 - 99	Floor number
Room Range		Start: 0 - 999999 End: 0 - 999999	Registers up to 25 room ranges (No.1 - 25).
Special Room No.		No.11 - 50	Selects a number to be valid from the door information (special room numbers 11 - 50) retrieved from the PC Server software.
Nonguest Room No.		No.100 - 199	Selects a number to be valid from the door information (special room numbers 100 - 199) retrieved from the PC Server software.
Extension Lock Type	Nonlatch	AL4H/Nonlatch/Latch/B Mode	AL4H: Auto lock mode (JR type lock using AL4H lock case) Nonlatch: Auto lock mode Latch: Lock/unlock repeat mode B Mode: Special operation mode ＊Normally not used
Dead Bolt Setting	Set (checked)	Set/Not set	Specifies whether or not the dead bolt function is used.
Dead Bolt Override (GU*/GM*)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Dead Bolt Override (ST*)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Buzzer (upon unlock)	No (unchecked)	Yes/No	Buzzer sound upon card operation
Buzzer (upon battery near end)	Yes (checked)	Yes/No	Buzzer sound when the master card or sub master card is used with low battery level

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Item	Default value	Range	Description
Buzzer (auto lock ⇔ continuously lock)	No (unchecked)	Yes/No	Buzzer sound upon card operation switching
Unlock time	5	1 - 59 (sec.)	Time before auto locking after unlocking
Guest valid start time	00:00	00:00 - 23:59	Valid term start time of guest card
Guest valid end time	00:00	00:00 - 23:59	Valid term end time of guest card
Guest valid day of the week (Sun)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Mon)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Tue)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Wed)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (Thurs)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week (FRI)	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Guest valid day of the week Sat	Valid (checked)	Valid/invalid	Valid/invalid setting of guest card
Auto time zone	N/A	Start: 00:00 - 23:59 End: 00:00 - 23:59	Time zone for continuous unlocking (up to four patterns)
Cylinder unlock key log	Recorded (checked)	Recorded/Not recorded	Operation log of mechanical key operation
Internal unlock key log	Recorded (checked)	Recorded/Not recorded	Operation log of unlocking with internal handle
Inner lever signal	Not recorded (unchecked)	Recorded/Not recorded	Whether or not to record the inner lever operation signal when the B mode lock case is used
Outer lever signal	Not recorded (unchecked)	Recorded/Not recorded	Whether or not to record the outer lever operation signal when the AL4H lock case (JR type) is used

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Item	Default value	Range	Description
Power supply	Alkaline battery	Alkaline battery/Lithium battery/Commercial power supply	Alkaline battery: Standard specification (Four AAA alkaline batteries) Lithium battery: Overseas Panic Bar Interface specifications Commercial power supply: AC-CD conversion adapter specification (Low battery detection is disabled)
Card detection interval	0.5	0.25/0.5/0.75/1 (sec.)	Specifies the card detection interval. * The battery is consumed less when the interval is longer.
Door ajar monitoring	N/A (To be supported in the future version)		
Door ajar error buzzer	N/A (To be supported in the future version)		
Card detection threshold	0	0 - 20	Adjustment of card detection level (default=0) * Should not be changed in normal situation.
GU* card battery near end indication	Not shown (unchecked)	Shown/Not shown	LED blinking when a guest or multi card is used with low battery level
ST* card battery near end indication	Not shown (unchecked)	Shown/Not shown	LED blinking when a standby card is used with low battery level

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・ Guest door

Item	Default value	Range	Description
Room No.	101	000001 - 999999	Room number for card lock
Before check-in time (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes before the valid term start time the guest card can be used for.
Check-out overtime (min.)	59	10/20/30/40/50/59 (min.)	Specifies how many minutes after the valid term end time the guest card can be used for.
Room floor	1	0 - 99	Floor number
Extension Lock Type	Nonlatch	AL4H/Nonlatch/Latch/B Mode	AL4H: Auto lock mode (JR type lock using AL4H lock case) Nonlatch: Auto lock mode Latch: Lock/unlock repeat mode B Mode: Special operation mode ＊Normally not used
Extension Lock Type	Nonlatch	AL4H/Nonlatch/Latch/B Mode	AL4H: AL4H lock case (JR type) Nonlatch: Auto lock mode Latch: Lock/unlock repeat mode B Mode: Special operation mode ＊Normally not used
Dead Bolt Setting	Set (checked)	Set/Not set	Specifies whether or not the dead bolt function is used.
Dead Bolt Override (GU*/GM*)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Dead Bolt Override (ST*)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Dead Bolt Override (MS)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Dead Bolt Override (SMS)	Not used (unchecked)	Used/Not Used	Unlock setting with the dead bolt protruded (double lock)
Buzzer (upon unlock)	No (unchecked)	Yes/No	Buzzer sound upon card operation

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Item	Default value	Range	Description
Buzzer (upon battery near end)	Yes (checked)	Yes/No	Buzzer sound when the master card or sub master card is used with low battery level
Buzzer (auto lock ⇔ continuously lock)	No (unchecked)	Yes/No	Buzzer sound upon card operation switching
Unlock time	5	1 - 59 (sec.)	Time before auto locking after unlocking
Cylinder unlock key log	Recorded (checked)	Recorded/Not recorded	Operation log of mechanical key operation
Internal unlock key log	Recorded (checked)	Recorded/Not recorded	Operation log of unlocking with internal handle
Inner lever signal	Not recorded (unchecked)	Recorded/Not recorded	Whether or not to record the inner lever operation signal when the B mode lock case is used
Outer lever signal	Not recorded (unchecked)	Recorded/Not recorded	Whether or not to record the outer lever operation signal when the AL4H lock case (JR type) is used
Power supply	Alkaline battery	Alkaline battery/Lithium battery/Commercial power supply	Alkaline battery: Standard specification (Four AAA alkaline batteries) Lithium battery: Overseas Panic Bar Interface specifications Commercial power supply: AC-CD conversion adapter specification (Low battery detection is disabled)
Card detection interval	0.5	0.25/0.5/0.75/1 (sec.)	Specifies the card detection interval. * The battery is consumed less when the interval is longer.
Door ajar monitoring	N/A (To be supported in the future version)		
Door ajar error buzzer	N/A (To be supported in the future version)		
Card detection threshold	0	Card detection threshold	0
GU* card battery near end indication	Not shown (unchecked)	GU* card battery near end indication	Not shown (unchecked)
ST* card battery near end indication	Not shown (unchecked)	ST* card battery near end indication	Not shown (unchecked)

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