# RF Card Reader & Controller(Model: FR200series)

FR200 is equipment to be installed on a door frame or wall to control the access of the door by preregistered RF cards and passwords.

In a compact design with numbers and symbols displayed on the LCD screen by a touch sensor, it can be use in various environments. It can be installed outside the room and house as the internal PCB is coated with epoxy and used alone without connecting to additional devices as it has a built-in control circuit or in the network environment after installing proprietary PC program.

Simple to register/delete/manage RF cards and passwords and easy to use by simply following the step-by-step instructions on the LCD screen and in voice guiding you to set up modes.

## (Product Specification and Appearance)



Effective Distance(Mifare/EM Card) : 4cm / 5cm (Based on ISO cards)

Storing capacity : Up to 100,000 cards/passwords / 1,000,000 events

Unlock time : 5 Seconds (Adjustable)

Door lock type : Power Fail Safe or Power Fail Secure

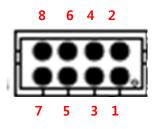
Exit button : Input of 1 exit button(Activating when low)

LCD/Audio guidance : LCD / Built-in Speaker

Power(Excluding door lock) : DC 12V, Power consumption: 150mA $\sim$ 350mA Operating environments :  $-20^{\circ}\text{C} \sim +65^{\circ}\text{C}$ , 0 $\sim$ 90% Absolute Humidity

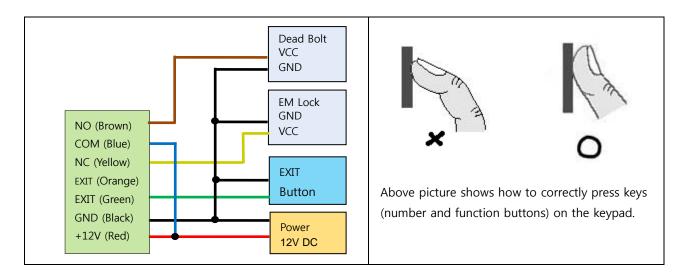
Color / Size (WxHxD)/Weight : Black / 73 x 126 x 18mm / 180g

## (Wiring Diagram)



1 : BLACK	2 : RED
3 : WHITE	4 : GREEN
5 : YELLOW	6 : ORANGE
7 : BROWN	8 : BLUE

- \*. Power: Connect power GND to Pin 1 and +12V to Pin 2.
- \*. Relay Output: Connect Normal Open (Pin 7), Common (Pin 8) and Normal Close (Pin 5)
- \*. Sensors: Connect Sensor0 (Pin 4, Exit) and sensor1 (Pin 3, Door Status)
- \*. Signal Grounds: Connect to Pin 6 and Pin 1

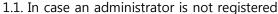


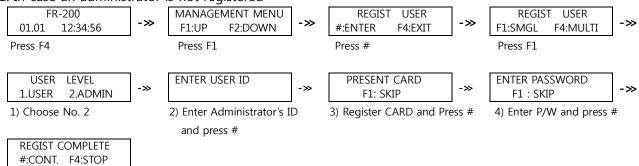
### (How to use)

- \*\* Upon turning the product on, date screen (model name/date) will be displayed on LCD and, upon touching the front side of the product, keypad with "number and function keys" are appeared. You can also set the keypad with "number and function keys" to be always ON by following the function key operation sequence explained at 6.7 How to set the backlight of LED/Keypad of this manual.
- \*\* All function settings including user registration, entrance/exit method, etc. can be started on "Management Menu" screen.

  Each time you press F1 key in the "Management Menu", screen will keep turning in order of "User Registration", "User Deletion", "Change of User Information", "User List" and "System Setting" and F2 key, in reverse order of the list..
- \*\* The description of each number/Function key is as follows:
  - -. # (hash): A key to confirm your selection (ENTER) in the course of the setting process.
  - -. F1: A key to turn the order of function screens upward.
  - -. F2: A key to turn the order of function screen downward, i.e reverse order of F1.
  - -. F3: A key to delete the last digit of the numbers entered in case you entered wrong numbers.
  - -. F4: A key to use to start, stop, cancel, exit function, etc. Press this key twice to go back to the initial date screen when you want to set another function or finish a setting process.
- \*\* The recommended sequences for function setting and user registration.
  - 1) Set functions and register user without registering an administrator.
  - 2) After finishing both function setting and user registration, register administrators (up to 5) or change to administrators in the "change of user information" screen.
  - 3) Be sure to register administrators to prevent the set functions from being changed by an unauthorized person.
- \*\* Pay special attention to administrator's cards or passwords not to be leaked

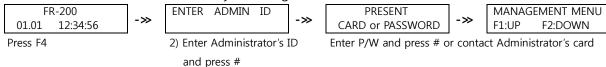
### 1. How to access administrator's menu





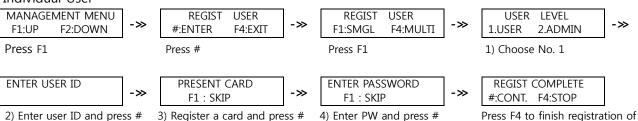
Press F4 to finish registration of an administrator. If you want to register more administrators (Up to 5), press # and repeat step 1) through 4) above

### 1.2. In case an administrator has already been registered



## 2. User Registration

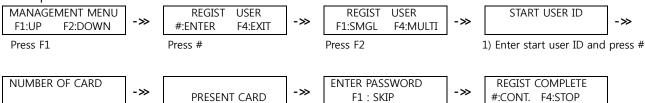
## 2.1 Individual User



a user. If you want to register more users, press # and repeat step 1) through 4) above

\*\* You can register a user without entering a card or a password in User ID depending on the situation.

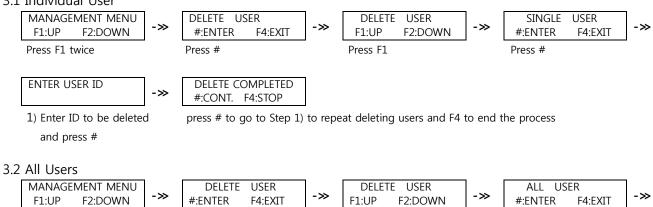
#### 2.2. Multiple Users



- 2) Enter No. of cards to register 3) Register cards and press # 4) Enter passwords and press # , and press #
  - \*\* When a large number of users are registered, it will be easy to use if you register them with user ID in order.
- \*\* If you press # in Step 4) above, Step 3) will be displayed again for registering another card and then Step 4) for entering password and it will repeat until you complete registering cards and entering passwords up to the number entered in Step 2. After completing registration of the last user, press # to end the process.
- \*\* It is highly recommended that you prepare and manage the list of user ID's and passwords of all registered users separately for future use.
- \*\* You can fulfill all registration, management and deletion of user information in the PC in case the system is networked with a PC.

## 3. Deletion of Users

#### 3.1 Individual User





Indication all users have deleted. Press F4 twice to go to date screen

Press F1 twice (or F2 once)

Press #

Press F4 to end the change

## 4. Change of User Information

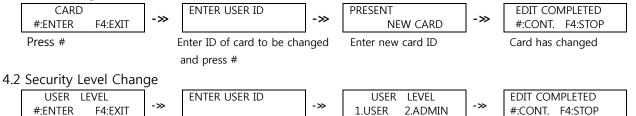


Enter ID to be change and press #

## 4.1 Card Change

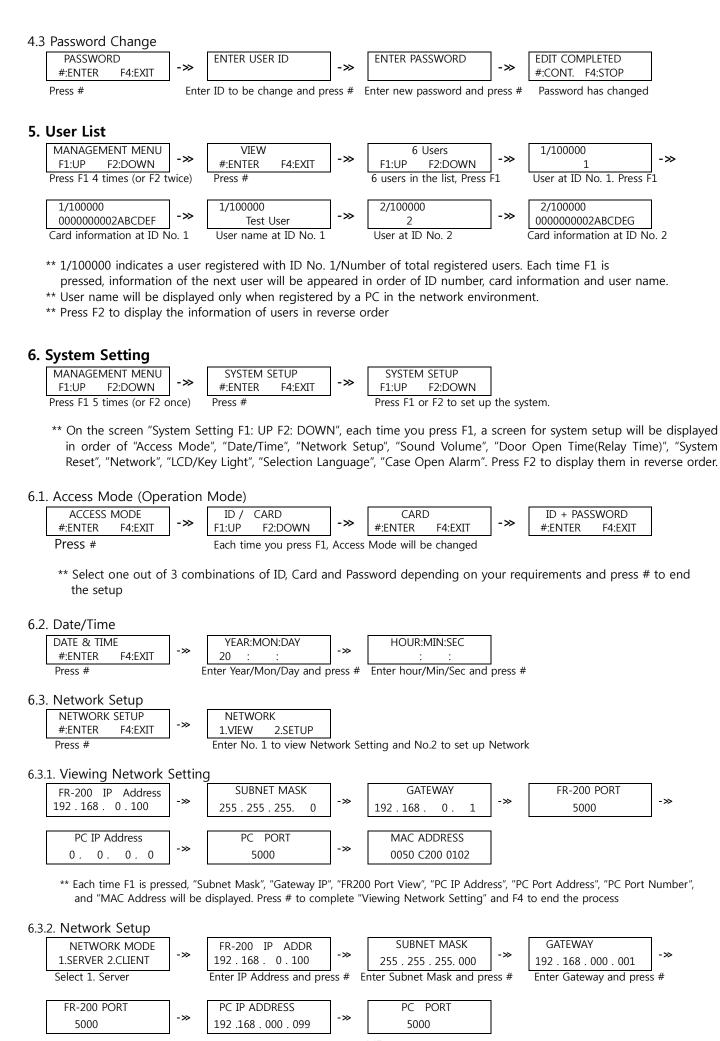
Press #

Press #



Select security level

<sup>\*\*</sup> On the "Change of User Information" screen, press F1 once to move to "Card Change" screen, twice to "Security Level Change" screen and three times to "Password Change" screen.



\*\* In case FS300 program is being used, select Server Mode in Network Mode for easy connection with remote terminals

#### 6.4. Sound Volume

SOUND VOLUME
#:ENTER F4:EXIT ->> SOUND VOLUME
p:10 n:

Press # Enter number between 0~10. The larger, the bigger volume. Press # to end the setting

- \*\* It is preset at 10 before shipping from the factory.
- \*\* P (Present) means the current sound level and N (New) means the sound level at which you are going to set.

#### 6.5. Door Open Time (Relay Time)

DOOR OPEN TIME
#:ENTER F4:EXIT ->> DOOR OPEN TIME
C:0005 S:0000

Press #

Enter number between 0~4095. The larger, the longer relay time. Press # to end the setting

Select by pressing F1 or F4

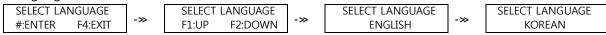
### 6.6. System Reset

Press #.

SYSTEM RESET SYSTEM RESET **INITIALIZE** ->> #:ENTER F4:EXIT PLEASE WAIT 1.YES 2.NO Press # Press 1 It takes a few minutes to reset the system 6.7. LCD/Key Light LCD&KEY LIGHT LCD&KEY ALWAYS LCD ALWAYS ON KEY ALWAYS ON #:ENTER F4:EXIT F1:UP F2:DOWN F1:UP F2:DOWN F1:UP F2:DOWN

Press F1

### 6.8. Language Selection



Press #. Press F1 or F2 to choose a language (English or Korean). Press # to end the setting

Press F1

## 6.9. Case Open Alarm



- \*\* When 1), 2) and 3) is selected, alarm will activate when case is opened but deactivate when the case is closed again.
- \*\* If No. 2 is selected in Step 2), you need to select No. 3 CLR in Step 1 to deactivate the alarm.
- \*\* If No. 2. OFF is selected in Step 1), alarm does not activate both when the case is opened or closed.

## (Network Connection)



If you want to use FR200 under the network environment connected via Ethernet, you are asked to order FR200N that is a Network Version integrated with a network module shown on the left.

Proprietary PC program (Model name: FS300) is provided at free of charge as a standard accessory to FR200.

BY the nature of the product, FR200 Series is a product recommended to use for a simple access control purpose by installing it as a stand-alone device, where the high level of security is not required. And FR200N Series is a network version of FR200 Series suitable for monitoring both access control and time & attendance on a real-time basis operated and controlled by a PC connected via Ethernet Communication.

<sup>\*\*</sup> Each time F1 is pressed, the light status of LCD and Key is changed. Press # to end the setting

## **FCC Notice**

### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

### **NOTE:**

THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.