Smart FingerPrint Reader

CDR-CDR-0193X / CFN-1000

User Manual (Ver2.0)

S1 Corporation

Safety precautions

These precautions aim at preventing users from being injured, experiencing discomfort or having property damaged. Be sure to read them thoroughly.

Warning
If this notice is ignored, the user may be fatally injured.

Caution
If this notice is ignored, the user may be injured and/or damaged in properties

Warning

●**DO NOT randomly move or relocate the system.**
 If you want to move or relocate the system, please be sure to contact us to prevent any dangerous situation such as a system failure, electric shock, or fire. (You will be billed the additional relocation costs.)

●**DO NOT place the system near a high-heat source.**
 The system may melt, causing an electric short, spark or fire.

●**DO NOT randomly disassemble, repair, or remodel the system.**
 This may cause a system failure, electric short, or fire. For any repairs, please contact us.

●**To prevent an electric shock: DO NOT handle the system with wet hands nor expose the system to any liquids (water, beverage, etc.).**
 This may result in fire or an electric short or spark.

Caution

●**Be sure to install the system directly away from sun rays.**
 If not, the external façade may deteriorate or the lifecycle may be shortened.

●**DO NOT install the system in a place with high humidity and/or much dust.**
 This may cause an electric shock or system failure.

●**DO NOT install the system in any place with wide temperature fluctuations.**
 The system may be damaged, causing failure.

●**DO NOT impact or shake the system.**
 This may result in a system failure.

●**DO NOT use the system for other purposes than access.**
 The system may be damaged, causing a failure.

Caution

●**DO NOT allow children to mishandle the system.**
  An accident may occur or a system failure.

●**Be sure to frequently clean the system of dust.**

●**Be sure to protect your fingers from the sharp edges of the card.**

●**Be sure to keep the card with you. If lost, please notify us.**

●**DO NOT make scribblings on the card or allow it to be tainted or disfigured.**

●**DO NOT allow children access to the card or place it around any magnetized appliance such as a TV, refrigerator, etc.**

●**DO NOT warp, cut or otherwise mangle the card.**

●**DO NOT put the system around magnetized objects.**
  This may cause a system failure and/or malfunction.

●**DO NOT press buttons with pointy objects such as a needle or pencil.**
  This may cause a system failure

●**DO NOT put any sharp object on the system such as a knife.**
  The surface may get scratched.

●**DO NOT put water directly on the system or use benzene, thinner, or alcohol to clean the system.**
  This may cause an electric short or fire.

●**DO NOT spray any pesticide or flammable spray on or near the system.**
  This may cause a system failure and/or fire.

●**Be sure to contact us once you experience any system failure or other problems.**
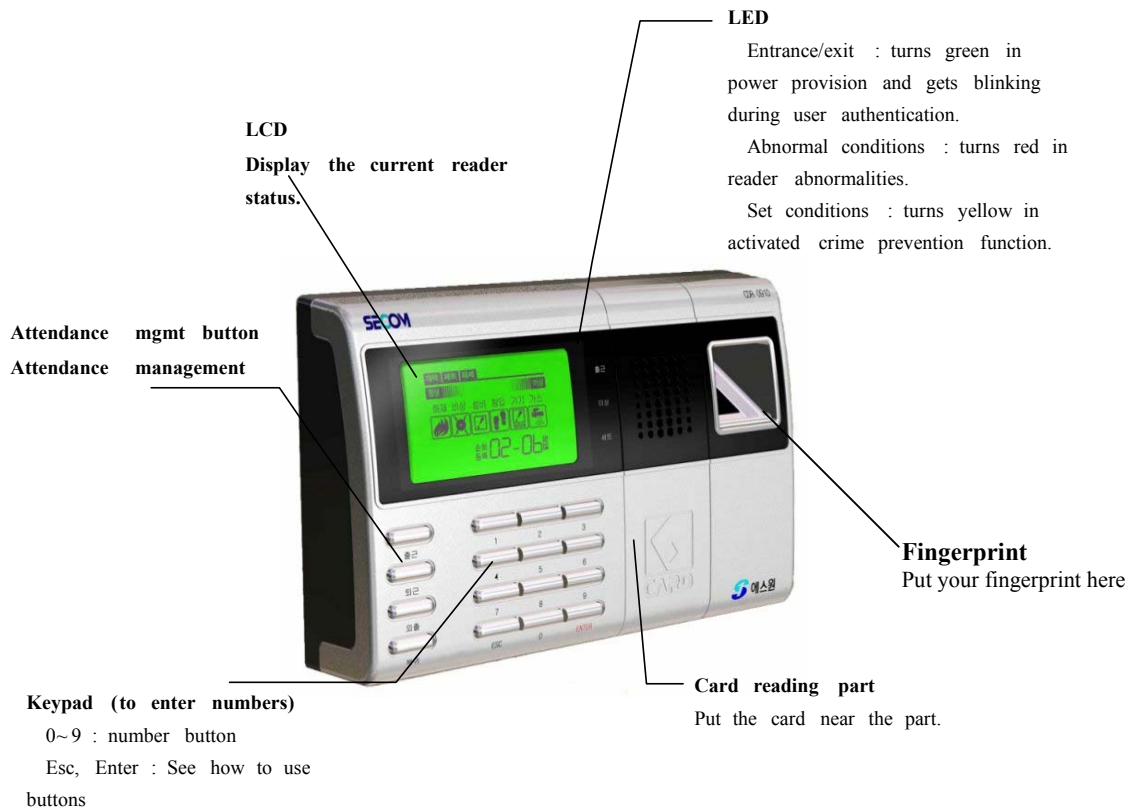

LABELLING REQUIREMENTS

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 operations.
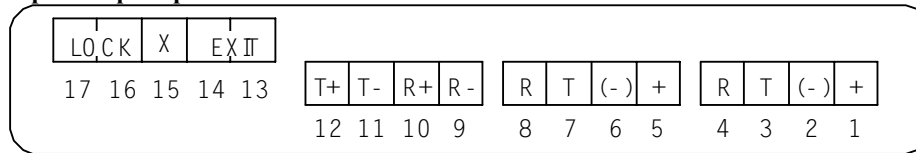

WARNING
Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Before system use: Familiarize yourself with the names of the system components.
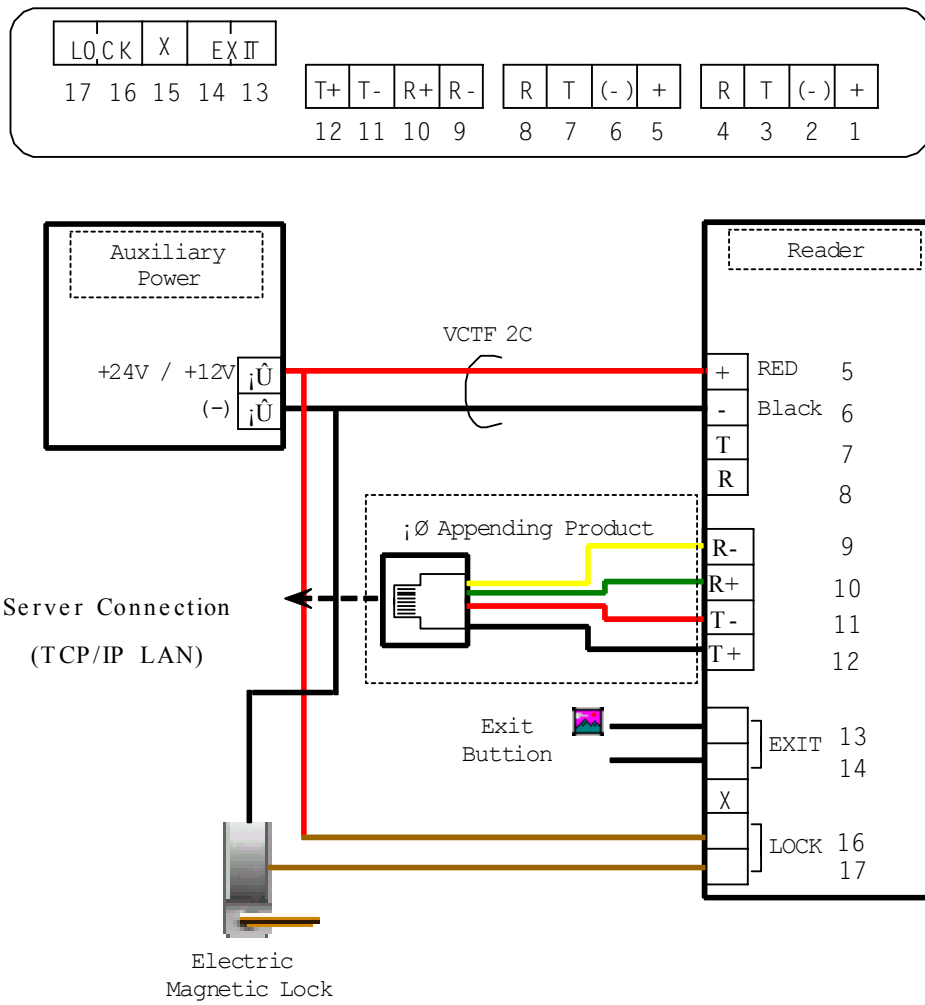
▼ Smart Fingerprint reader

LED

  Entrance/exit : turns green in power provision and gets blinking during user authentication.

  Abnormal conditions : turns red in reader abnormalities.

  Set conditions : turns yellow in activated crime prevention function.

LCD

Display the current reader status.

Attendance mgmt button
Attendance management

Fingerprint
Put your fingerprint here

Card reading part
Put the card near the part.

Keypad (to enter numbers)

  0~9 : number button

  Esc, Enter : See how to use buttons

1. Input/Output Spec.

LOCK	X	EXIT

```
  17  16  15  14  13    T+ T- R+ R-    R  T (-) +     R  T (-) +
                        12 11 10 9     8  7  6  5     4  3  2  1
```

- External Input/Output Terminal

No	Name	Input/Output	Specification
1	+	Input	Power
2	(-)	Input	
3	T	Input	RS-422 Receive (Rx)
4	R	Output	RS-422 Send (Tx)
5	+	Input	Power
6	(-)	Input	
7	T	Input	RS-422 Receive (Rx)
8	R	Output	RS-422 Send (Tx)
9	R-	Input/Output	RJ-45 Output
10	R+		
11	T-		
12	T+		
13	EXIT	Input	If reader directly control the door : EXIT Button
14		Input	
15	Not used		
16	LOCK	No voltage Output	For only single type, used for Electric magnetic lock. ¡Ø By using Electric magnetic lock type selection switch, select NO (Normal Open) or NC (Normal Close)
17		No voltage Output	

2. Interface Diagram

LOCK	X	EXIT		
17	16	15	14	13

T+	T-	R+	R-
12	11	10	9

R	T	(-)	+
8	7	6	5

R	T	(-)	+
4	3	2	1

Auxiliary Power

+24V / +12V

(−)

VCTF 2C

Reader

+	RED	5
-	Black	6
T		7
R		8

¡Ø Appending Product

R-		9
R+		10
T-		11
T+		12

Server Connection

(TCP/IP LAN)

Exit Button

EXIT	13
	14

X

LOCK	16
	17

Electric Magnetic Lock

Before system use:

How to use buttons

Enter button: enables you to select a menu or enter a number. If SBMS is connected, you can use this button for set/release.

Esc button: enables you to delete/modify an entered number, to cancel a selection in menu mode, or to go back to a previous menu.

To change to attendance mgmt/ attendance & exit (or access) mode, press and hold the button for over two seconds.

If a menu remains unused for more than five seconds, the screen will revert to the previous menu or go into attendance mgmt/access mode.

To select a menu, you can press a corresponding number button. If you see the (▼) symbol at the bottom right of the screen, you can scroll the screen by pressing the "0" button.

Signal tones in operation

No	Type	Generated tones	Operations
1	Beep	" Beep"	Button operation/motion check
2	Beep Error	" Bee-beep"	Error indication
3	Beep Ready	"Bee-reek"	Successful entrance
4	Beep OK	"Bee-ri-reek "	Successful verification and crime prevention setting request in registration

When you initially use this product…

In this case, the reader has no data for a master (administrator) or a user. Once the installed reader is powered-up for the first time, you need to register a master (administrator).

A master can access and manage every function, including user registration addition/deletion and reader settings. Up to five masters can be registered. (See Registering/deleting a master.)

Registering (adding) a master

When you turn on the reader, the LCD screen displays a message: "-Master Registration- Approach card to be registered or Input ID"

In order to register the master, using master keypad to enter or
Keypad registration.

Menu Configuration

Menu items in Setup mode

```
                        ┌─────────────────┐
                        │   Setup Menu    │
                        └─────────────────┘
                        ┌─────────────────┐
                        │  1.Card Reader  │
                        │ ┌─────────────┐ │
                        │ │2.User Add/Del│ │
                        │ └─────────────┘ │
                        └─────────────────┘

  ┌─────────────┐                              ┌─────────────┐
  │ Card Reader │                              │ User Add/Del│
  └─────────────┘                              └─────────────┘

  ┌───────────────────┐                        ┌───────────────────┐
  │ 1.Master Add/Del  │                        │ 1.Registration    │
  │ 2.Setup Reader    │                        │ 2.Delete          │
  └───────────────────┘                        │ 3.Delete All      │
                                               └───────────────────┘
```

Master Add/Del
1.Registration
2.Delete

Setup Reader
1.Operation Mode
2.Authentication
3.Beep&Voice
4.Security Level

Operation Mode
1.Access
2.Attendance

Access
1.Reader No
2.Set Time

Attendance
1.Set Network
2.Attend.Time
3.Access Control
4.Open Duration
5.Forcing Open
6.Forcing Close
7.Set Time
8.Initialize

Authentication
- Authentication-
1.RF Card & FP
2.RF Card

Beep and Voice
- Beep&Voice :ON -
1. ON 2. OFF

Security Level
- Security Level:5 -
(1-7)
05

Sub-menus may vary depending on the selection of operation mode settings. (See P. 15.)

User registration/deletion functions are displayed only on the operation mode "5. Attendance" menu.

Going to Setup mode: In this case, one user should be registered as a master.

1. Press the 'Enter' and 'F3' buttons simultaneously.

2. When the LCD screen displays '-Master Authentication- Approach master card or input ID number:', place your card over the card reader.

```
_        Master        _
      Authentication


Approach master card
  or input ID number
 ID : _____
```
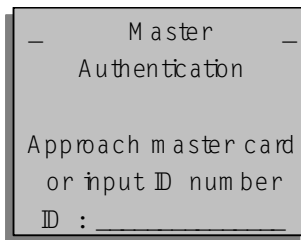
3. If the master authentication process fails, you will hear a "Beep-beep" sound with a voice message: "Please retry."

Going to Monitor (Inquiry) mode:

1. Press the Enter and F2 buttons simultaneously.

2. In Monitor mode, you can view the "Operation mode" and "Authentication" , "Beep & Voice" status.

```
   - Monitor mode -
1. Operation Mode
2. Authentication
3. Beep&Voice
```
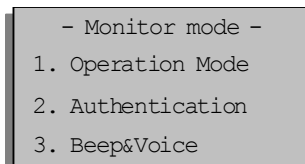
When you select "1, Operation mode", the following menu will be displayed depending on the current operation mode.
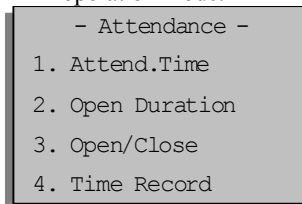
```
   - Attendance -
1. Attend.Time
2. Open Duration
3. Open/Close
4. Time Record
```
(Attendance operation)

```
   - Access -
```
(Access operation)

When you press the number of an item, you can view the corresponding setting.
Out of Attendance monitor menus, "4. Time Record" enables you to view the working hours per month/employee.

Registering (Adding) a master: Up to five masters can be registered.

1. In Setup mode, select "1. Card Reader."

2. Select "1. Master Add/Del."

```
   - Card Reader -

 1.Master Add/Del

 2.Setup Reader
```

3. Select "1.Registration."

```
  -Master Add/Del-

 1. Registration

 2. Delete
```
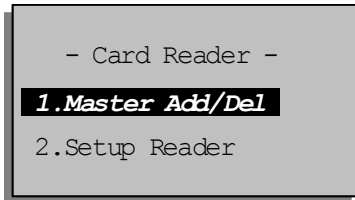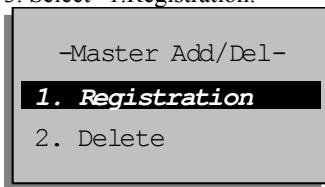
4. When the message, "- Master Registration - Approach card to be registered or Input ID:" is displayed, place a card for master access over the card reader.

```
 _      Master       _

       Registration

   Approach card to be

 registered or Input ID :

  ID : _____
```
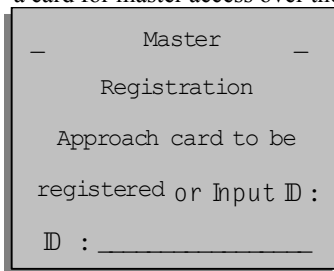
5. When registration is completed, you will see the message "Completed" and the screen reverts to the setup menu.

```
     Completed.
```

Deleting a master

1. In Setup mode, select "1. Card Reader."

2. Select "1.Master Add/Del."

```
    - Card Reader -
 1.Master Add/Del
 2.Setup Reader
```

3. Select "2. Delete."

```
  -Master Add/Del-
 1.Registration
 2. Delete
```
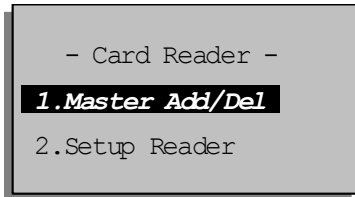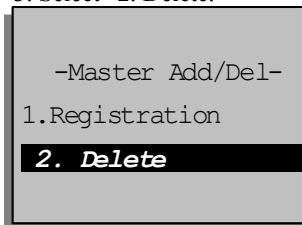
4. When the message is displayed, "- Master Registration - Approach card to be registered or Input ID:.", place the selected master card over the card reader.

```
    -Master Delete-
   Approach card to be
   deleted or input ID
         number
 ID : _____
```
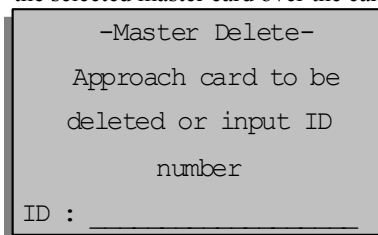
With the keypad, you can enter a five-digit ID and then press the "Enter" button for deletion.

5. The "Completed" message will display for a few moments followed by the previous message, "Approach card to be deleted or input ID number", again. To continue deleting another master, place another master card over the card reader.

```
 Completed.
```
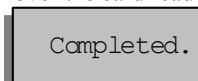
To exit the setting, press the Esc button for at least two seconds to return to the previous menu.

6. If you delete two master cards, a message is displayed, "Masters are Deleted.", with the screen waiting for master registration.

```
   Master are
   Deleted.
```
→
```
 -Master Registration-
 Approach card to be
      registered
```
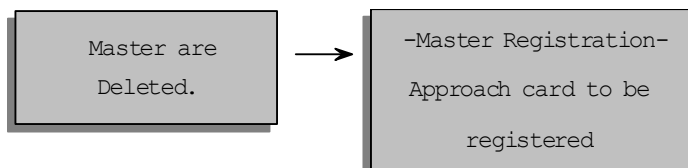
Without any master, the reader will remain ready for master registration and not be available for any other process. The reader needs to hold at least one registered master for normal operation.

Settingup authentication method : Either "RF Card+FP" or "RF Card"

1. Select '1.Card Reader'in setup mode.

2. Select '2.Setup Reader'.

```
        -Card Reader-
     1.Master Add/Del
     2.Setup Reader
```

3. Select '2.Authentication'.

```
        -Setup Reader-
     1.Operation Mode
     2.Authentication
     3.Beep&Voice
     4.Security Level
```
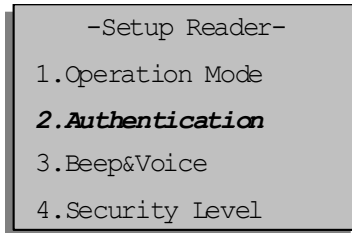
4. Select either '1.RF Card + FP' or '2.RF Card'

```
      - Authentication -
     1.RF Card + FP
     2.RF Card
```
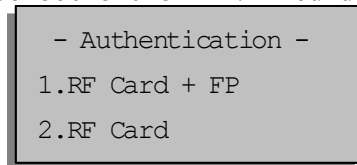
"1.RF Card + FP"

For a user authentication, put the card on the reader & follow the voice guidelines

& then enter fingerprint.

If you are already registered user, enter your Id number or keypad.

Follow the guidelines & then put your fingerprint.

(Possible to use password instead of using fingerprint)

"2.RF Card"

During the authentication, put your card on the reader.

(In this case, cannot using keypad)

Setting beep tones and voice settings: You can set the beep tones and voice to be activated/de-activated.

1. In Setup mode, "1Card Reader."

2. Select "2. Setup Reader."

```
    -Card Reader-
  1.Master Add/Del
  2.Setup Reader
```

3. Select '3.Beep & Voice'.

```
      -Setup Reader-
  1.Operation Mode
  2.Authentication
  3.Beep&Voice
  4.Security Level
```
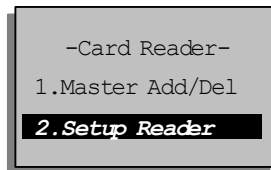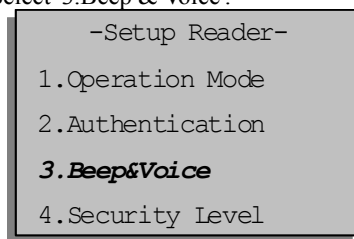
4. Indicate Beep & voice setting up menu. Select "On" or "Off"

```
  - Beep&Voice : ON -
   1. ON
   2. OFF
```
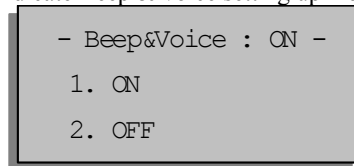
On Mode: Using Beep & Voice
Off Mode: Not using Beep & Voice

Setup Security Level: Function for successful level settingup during the authentication

Security Level-

Low level: easy to authenticate but lots of other peoples' authentication failure occur

High level: small errors occur but low probability of authentication success

1. Select '1.Card Reader'on the setup menu

2. Select '2.Setup Reader'

```
    -Card Reader-
1.Master Add/Del
2.Setup Reader
```
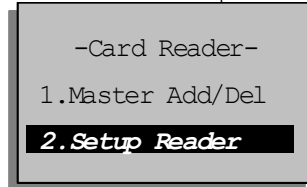
3. Select'4.Security Level'

```
    -Setup Reader-
1.Operation Mode
2.Authentication
3.Beep&Voice
4.Security Level
```
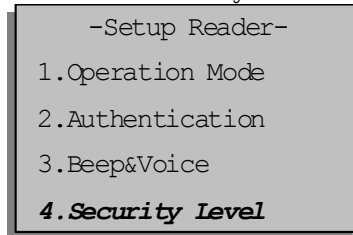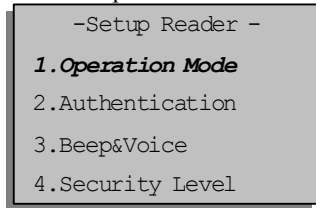
4. Select the Number (from 01 to 07)

```
  - Security Level: 05-
       (1~7)
         05
```
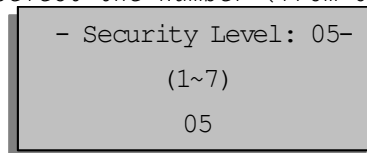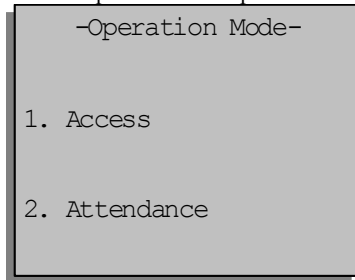
Setting Operation mode: The reader can adopt one of six operation modes depending on your company's requirements. Complying with the operation mode specified in the contract, you need to set the mode in use. If you want to select another mode, be sure to contact our service center in advance.

1. In Setup mode, select "1. Card Reader."

2. Select "1. Operation Mode."

```
      -Setup Reader -
  1.Operation Mode
  2.Authentication
  3.Beep&Voice
  4.Security Level
```

3. Select the operation mode specified in the sales agreement (contract).
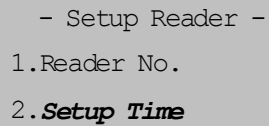
```
      -Operation Mode-


  1. Access


  2. Attendance
```

Depending on the chosen operation mode, the setup menu may vary as shown below.

1. When you select "1. Attendance/exit (access) & Crime Prevention"

This operation mode only needs to be selected when you use S1's crime prevention system (GBMS).
Selecting "1. Attendance/exit & Crime Prevention," you can see the sub-menu items as shown below:
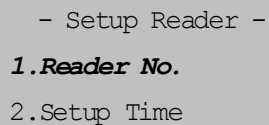
```
      - Setup Reader -
1.Reader No.

2.Setup Time
```

Setting card reader No.: With S1's crime prevention system in use, you need to set a different number for each
system for normal communication.
GBMS: 01~04, FS: 01~02
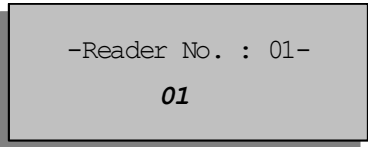
1. Select "1. Reader No."

```
      - Setup Reader -
1.Reader No.

2.Setup Time
```
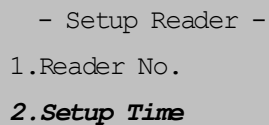
2. The current card reader No. is displayed. Delete the number and enter a new number, then press the Enter
button.

```
      -Reader No. : 01-
             01
```
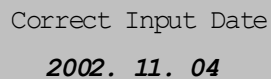
Setting time

1. Select "2. Setup Time."
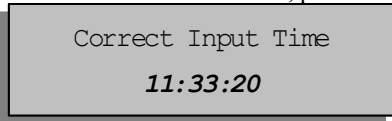
```
      - Setup Reader -
1.Reader No.

2.Setup Time
```

2. The current date is displayed. With the Esc button, delete the existing year/month/date and use the number
buttons to enter a new one. Then, press the Enter button.

```
   Correct Input Date
      2002. 11. 04
```
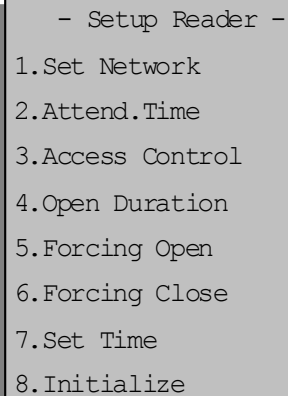
3. The current time is displayed. With the Esc button, delete the existing hour/second and use the number
buttons to enter a new one. Then, press the Enter button.

```
   Correct Input Time
        11:33:20
```

2. When you select "2. Attendance"

This operation mode is required when you select the Attendance function alone.
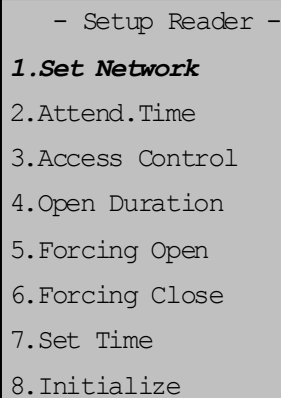Selecting "2. Attendance", you can see the sub-menu items as shown below:

```
       - Setup Reader -
1.Set Network

2.Attend.Time

3.Access Control

4.Open Duration

5.Forcing Open

6.Forcing Close

7.Set Time

8.Initialize
```

Setting network: In Attendance program operation, you need to enter network settings as accurately as possible for

normal use.

1. Select "1.Set Network"

```
       - Setup Reader -
1.Set Network

2.Attend.Time

3.Access Control

4.Open Duration

5.Forcing Open

6.Forcing Close

7.Set Time

8.Initialize
```

2. Enter an IP address for the reader and press the Enter button.

```
          IP Address

        ___.___.___.___
```
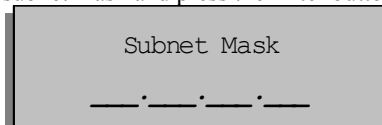
3. Enter a gateway and press the Enter button.

```
           Gateway

        ___.___.___.___
```
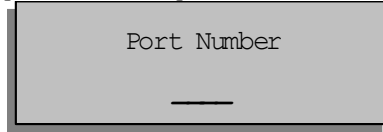
4. Enter a subnet mask and press the Enter button.

```
          Subnet Mask

        ___.___.___.___
```

17/4033

5. Enter a port number and press the Enter button.
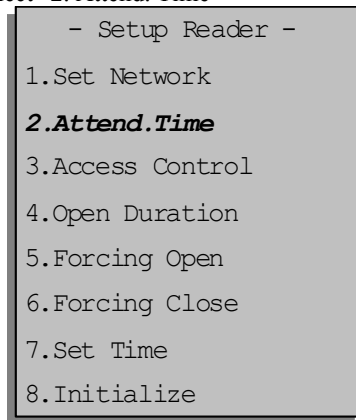
```
          Port Number

             ━━━━
```

6. The LCD screen displays the message "Completed. - Reboot..!!". The reader will then reboot.

If you want to modify settings you entered, existing values will be displayed. For modification, you can delete a value with the Esc button for re-registration.

Setting Attendance time: You can alternate between Automatic time shift and Manual time shift modes.

1. Select "2. Attend. Time"
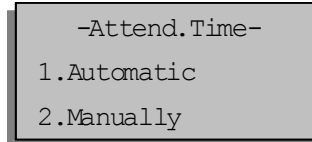
```
      - Setup Reader -
   1.Set Network
   2.Attend.Time
   3.Access Control
   4.Open Duration
   5.Forcing Open
   6.Forcing Close
   7.Set Time
   8.Initialize
```

2. Select either "1. Automatic" or "2. Manually."
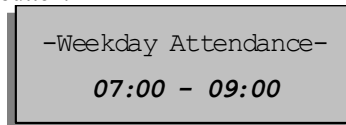
```
      -Attend.Time-
   1.Automatic
   2.Manually
```
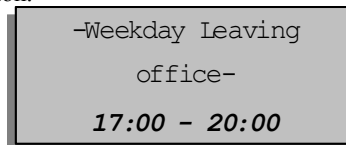
In case of "1. Automatic"

3. The current weekday attendance time is displayed. Delete the current time and enter a new time, then press the Enter button.
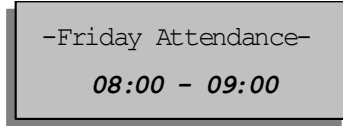
```
   -Weekday Attendance-
      07:00 - 09:00
```

4. The current weekday leaving time is displayed. Delete the current time and enter a new time, then press the Enter button.

```
    -Weekday Leaving
         office-
      17:00 - 20:00
```

5. The current Friday attendance time is displayed. Delete the current time and enter a new time, then press the Enter button.

```
-Friday Attendance-
   08:00 - 09:00
```

6. The current Saturday leaving time is displayed. Delete the current time and enter a new time, then press the Enter button.

```
 -Friday Leaving
     office-
  11:00 - 14:00
```

7. The current Saturday attendance time is displayed. Delete the current time and enter a new time, then press the Enter button.

```
-Weekend Attendance-
   08:00 - 09:00
```

8. The current Saturday leaving time is displayed. Delete the current time and enter a new time, then press the Enter button.

```
 -Weekend Leaving
     Office-
  11:00 - 14:00
```
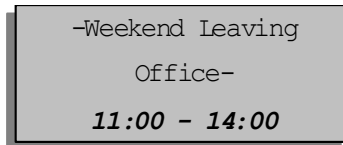
For automatic time shift, you don't have to press the Attendance button (check-in, leaving, return, and check-out). When you are authenticated (by card access or keypad entrance), Attendance information will be stored into the Attendance mode displayed on the current screen

When exceeding a specified shift time, the screen will show "Leaving." For other Attendance modes, you can press the Attendance button for user authentication.
With the Attendance button, once user authentication is completed or entrance times exceeded, the screen will revert to the former Attendance mode.

In case of "2. Manually"
1. When "2. Manually" is selected, you will see the message, "Completed." The screen then reverts to the setup menu.

```
"Completed"
```
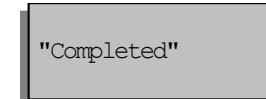
In "Manual" mode, you need to press the Attendance button (check-in, leaving, return, and check-out) for user authentication. If not, Attendance information will not be stored.

Setting limited attendance/exit (access): This function enables limits to be set for user access.

1. Select "3. Access Control"

```
    - Setup Reader -
1.Set Network
2.Attend.Time
3.Access Control
4.Open Duration
5.Forcing Open
6.Forcing Close
7.Set Time
8.Initialize
```

2. The current access setting status will be displayed. Select either "1.Global Access" or "2.Local Access."

```
-Access : Global-
1.Global Access
2.Local Access
```
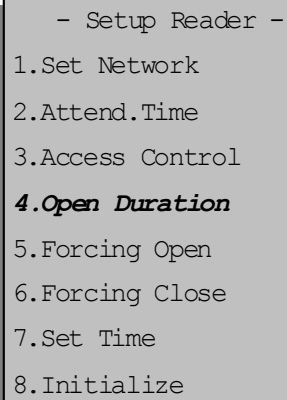
Descriptions of operation
  Global Access
  - When a user wants to enter or exit, the reader first checks if the corresponding user is registered in the
    reader. If there is no match, the system will search for the user from the upper system (server).
    The upper system (server) checks if the user is accessible, and notifies the reader of the result. Given
    this, the reader allows the user to enter or not.
  Local Access
  - When a user wants to enter or exit, the reader first checks if the corresponding user is registered in the
    reader. If there is no match, the reader rejects the user's access.
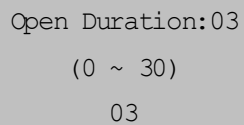   In this mode, the reader does not ask the upper system (server) to search for the user.

Setting the door open time: In user authentication, the electric door lock remains open for a specified time. This function enables setting of the door open time.

1. Select "4. Open Duration"

```
     - Setup Reader -
1.Set Network
2.Attend.Time
3.Access Control
4.Open Duration
5.Forcing Open
6.Forcing Close
7.Set Time
8.Initialize
```
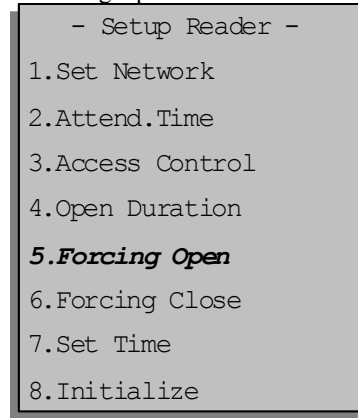
2. Delete the current set time and enter a new time (up to 30 seconds). Then press the Enter button.
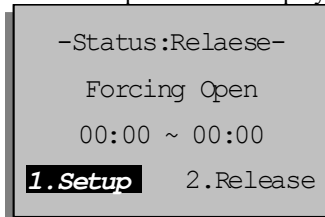
```
  Open Duration:03
     (0 ~ 30)
        03
```

Setting door open by force: This setting enables the door open for a specified time.
When the set time is expired, the electric lock system of the door will be back in operation.

1. Select "5. Forcing Open"

```
      - Setup Reader -
1.Set Network
2.Attend.Time
3.Access Control
4.Open Duration
5.Forcing Open
6.Forcing Close
7.Set Time
8.Initialize
```

2. The current forced open status is displayed. Select "1. Setup."

```
   -Status:Relaese-
     Forcing Open
   00:00 ~ 00:00
 1.Setup    2.Release
```
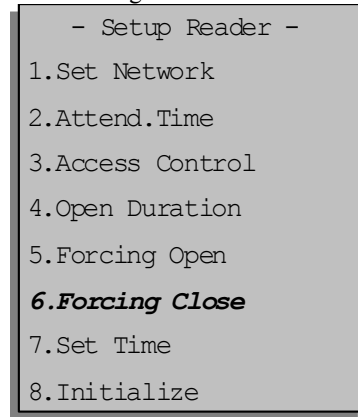
When you select "2. Release", the 'door opened by force' time will not be available. You will see the message, "Completed." and the screen reverts to the setup menu.

3. Delete the current set time and enter a new time, then press the Enter button.

```
Input Correct Time
   __:__ - __:__
```
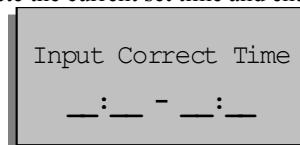
Setting door closed by force: This setting enables the door to be locked for a specified time. During the time, a common user cannot use the authentication function. Only a master can use it.
When the set time expires, the electric lock system of the door will be back in operation.

1. Select "6. Forcing Close"

```
     - Setup Reader -
1.Set Network
2.Attend.Time
3.Access Control
4.Open Duration
5.Forcing Open
6.Forcing Close
7.Set Time
8.Initialize
```

2. The current forced close status is displayed. Select "1. Setup."

```
    -Status:Relaese-
     Forcing Close
    00:00 ~ 00:00
 1.Setup    2.Release
```

When you select "2. Release", the 'door opened by the force' time will not be available. You will see the message, "Completed", and the screen reverts to the setup menu.

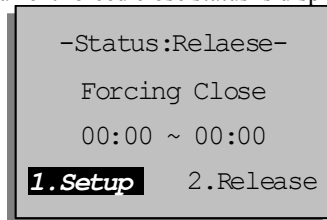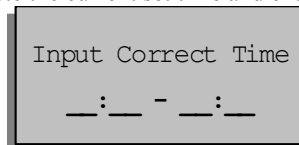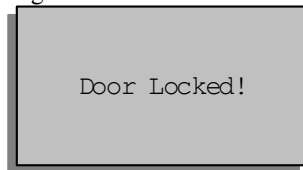3. Delete the current set time and enter a new time, then press the Enter button.

```
 Input Correct Time
   __:__ - __:__
```

When the door is being closed, the LCD screen displays "Door locked!." If this function is not activated, a general Attendance screen is displayed.

```
    Door Locked!
```

Setting a time

1. Select "7. Set time."

```
      - Setup Reader -

1.Set Network

2.Attend.Time

3.Access Control

4.Open Duration

5.Forcing Open

6.Forcing Close

7.Set Time

8.Initialize
```

2. Select either "1. Setup Manually" or "2. Download."

```
 -Setup Time-

1.Setup Manually

2.Download
```

In case of "1. Setup Manually"

3. The current date is displayed. With the Esc button, delete the existing year/month/date and enter a new one with the number buttons. Then, press the Enter button.

```
   Input Correct Date

     2002. 11. 04
```

4. The current time is displayed. With the Esc button, delete the existing hour/minute and enter a new one with the number buttons. Then, press the Enter button.

```
   Input Corrct Time

      11:33:20
```

In case of "2. Download"

1. Select "2. Download."

```
 -Setup Time-

1.Setup Manually

2.Download
```

This function enables the reader to be synchronized with the Attendance program (server) time. In this case the reader needs to be connected to the server.
If there is no connection, a message will be displayed on the screen: "Not connected to the server."

Getting initialized: This function aims at initializing events (Attendance information) or reader setting information stored at the reader.

1. Select "8. Initialize."

```
    - Setup Reader -

1.Set Network

2.Attend.Time

3.Access Control

4.Open Duration

5.Forcing Open

6.Forcing Close

7.Set Time

8.Initialize
```

2. Select either "1.Event Init" or "2. Setup Init."

```
     -Initialize-

1.Event Init

2.Setup Init

3.Reboot
```

In case of "1. Event Init"

3. The LCD screen displays "Event Init." To initialize an event, select "1. Yes"; otherwise, select "2. No."

```
 - Event Init -

1.Yes

2.No
```

In case of "2. Setup Init"

1. The LCD screen displays "Setup Init." To initialize a setup, select "1. Yes"; otherwise, select "2. No."

```
 - Setup Init -

1.Yes

2.No
```

In case of "3. Reboot"

1. The LCD screen displays "Reboot." To initialize a setup, select "1. Yes"; otherwise, select "2. No."
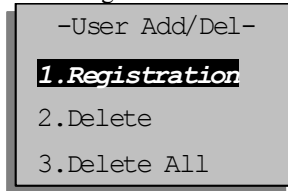
```
 - Reboot -

1.Yes

2.No
```

Registering (adding) a user: The user registration function is available in "Attendance" operation mode only. Up to 1,000 users can be registered.
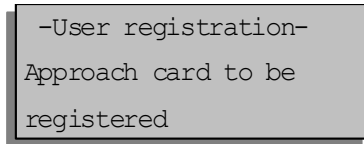
1. In Setup mode, select "2. User Add/Del."

```
     -Setup Menu-
 1.Card Reader
 2.User Add/Del
```

2. Select "1. Registration."

```
    -User Add/Del-
 1.Registration
 2.Delete
 3.Delete All
```
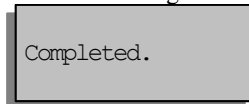
3. When the LCD screen displays "Approach card to be registered", place a user access card over the card reader.

```
 -User registration-
 Approach card to be
 registered
```

4. You will see a message on the screen: "Completed", and then the screen goes to the user registration screen.
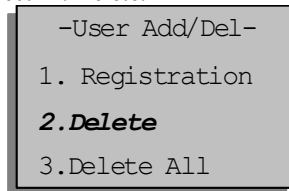
```
 Completed.
```

Deleting a user: This setting enables deletion of a registered user.
This function allows for deletion of an individual user (Delete) or deletion of all users simultaneously (Delete All).

1. In Setup mode, select "2.User Add/Del."

```
   -Setup Menu-
1.Card Reader
2.User Add/Del
```

In case of "2. Delete"
1. Select "2. Delete."

```
   -User Add/Del-
1. Registration
2.Delete
3.Delete All
```

2. The current number of registered users is displayed. Place an access card over the card reader for deletion, or enter the resident registration number or the corresponding five-digit ID with the keypad. Then press the Enter button.

```
- User :  000 -
 Approach card to be
deleted or input ID
nmuber
 ID:_____
```
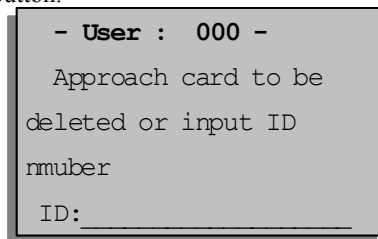
3. The screen displays "Completed", and goes to the user deletion screen.

```
Completed
```
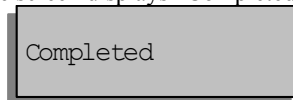
In case of "3.Delete All"
1. Select "3.Delete All."

```
   -User Add/Del-
1. Registration
2.Delete
3.Delete All
```
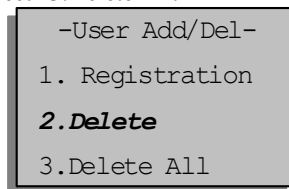
2. The screen displays "Are you sure?." To delete all, select "1. Yes"; otherwise, select "2. No."

```
 Are you sure?
1. yes     2. No
```
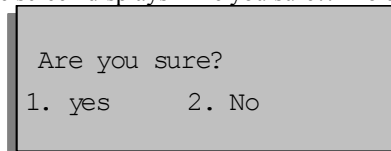
3. You will see a message, "Completed", and then the screen reverts to the previous menu.

```
 Completed
```

If all users are deleted, the screen displays "No registered card."

```
 No registered card
```

In case of entire deletion, the master will remain intact.

Copying DB: This function enables the DB of a registered reader to be copied to a new reader.

1. Open the cover of the reader.
2. Connect the two readers with a communication cable.
3. Press the Enter and Leave buttons at the same time.

In Access Operation mode

Creating an access (Attendance/exit)
A user can create an access with only a few easy steps.
Place the card over the card reader.
●Without a card, you will not be able to create an access with crime prevention.

Setting crime prevention mode (Connect to the S1's alarm system)
When you setup the crime prevention mode, the card will work seamlessly with S1 Corporation's crime prevention system in crime prevention mode.
With the reader, you can set the crime prevention mode in either a "release" state or "set" state.
With the Enter button pressed, place the card over the card reader.
For the general user, follow the guidelines & then enter password or fingerprint.
●Note: This setting is not allowed for an access-dedicated card or visitor's card.
●Without the Enter button pressed, the crime prevention mode cannot be shifted to "set" mode.

● Without a card   (Fingerprint user)

Press the Enter Key over 2 seconds, enter   ID number and then put the fingerprint or password.
In case of crime prevention mode, only can use fingerprint.

Releasing the crime prevention mode
With the reader, you can set the crime prevention mode from either the "set" or "patrol" states to "release" state.
With the Enter button pressed, place the accessed card over the card reader.
For the general user, follow the guidelines & then enter password or fingerprint.

● Note: This setting is not allowed for an access-dedicated card or visitor's card.
● Without the Enter button pressed, the crime prevention mode cannot be shifted to "release" mode.

● Without a card   (Fingerprint user)

Press the Enter Key over 2 seconds , enter   ID number and then put the fingerprint or password.
In case of crime prevention mode, only can use fingerprint.

In Attendance Operation mode

Button types
1. When the Function button is pressed, the LCD screen displays sub-menus, where you can select a mode and handle the card.
●When the "Enter?" and the "Leave?" button are pressed, the following sub-menus are displayed.

```
- Enter Menu -            - Leave Menu -
1. Personal               1. Personal
2. Public                 2. Public
```

●The following sub-menus are displayed on the LCD screen.

	Personal	Public
Enter	Normal attendance	
Enter?	1. Hospital	1. Sort Biz-Trip
	2. Sickness	2. Biz-Trip
	3. 1/2 Vacation	3. Training & Sem.
	4. 1/2 Spec. Leave	4. Auth-App.
	5. 1/2 Flexiday	5. Paid Others.
		6. Unpaid Others.
Leave	Normal leaving	
Leave?	1. Hospital	1. Sort Biz-Trip
	2. Sickness	2. Biz-Trip
	3. 1/2 Vacation	3. Training & Sem.
	4. 1/2 Spec. Leave	4. Auth-App.
	5. 1/2 Flexiday	5. Paid Others.
		6. Unpaid Others.

Using Attendance in Automatic time shift mode (Authentication-RF Card + FP   )

In this case, the Attendance mode can be automatically shifted.
In Automatic time shift mode, the "Attendance" and "Leaving Office" operation modes are automatically displayed on the LCD screen at a set time.
- In this mode, you can change the Attendance mode with the function button. In this case, the mode reverts back to the previous Attendance mode in about three seconds.
Place your card over the card reader.

Without a card, enter ID number, and then press enter button
Follow the guidelines, press password or fingerprint

● The following table shows basic settings for the Attendance time.

	Attendance time	Leaving time
Weekday	07:00 ~ 09:00	17:00 ~ 20:00
Friday	07:00 ~ 09:00	16:00 ~ 18:00
Saturday	07:00 ~ 09:00	11:00 ~ 14:00

●In times other than the ones shown above, the LCD screen displays "Samsung House." Unless you handle the Attendance button, your card will not be read by the reader.

Using Attendance in Manual mode(Authentication-RF Card + FP)

This setting prevents the Attendance mode from being shifted automatically.
  Press the function button you want.
  Place your card over the card reader.
●Without any card, you cannot use the Attendance reader.
●The following shows the basic settings of Attendance time.
●As the last Attendance mode will remain in your card, you can check on the LCD screen if the current Attendance
  mode is what you want before handling the card.

Inquiring (monitoring) the working hours per employee

Requesting working hours and overtime hours from the server to view on the reader.

1. Press the Enter button and the F4-Leave? button simultaneously.

2. Select "1. Operation Mode." This function is available only in Attendance operation mode.

```
    - Monitor mode -
1. Operation Mode
2. Authentication
3. Beep&Voice
```

3. As for "1. Operation Mode", the following monitor mode will be displayed depending on the current operation mode.

```
    - Attendance -
1. Attend.Time
2. Open Duration
3. Open/Close
4. Time Record
```

4. Select "4. Time Record."

```
    - Attendance -
1. Attend.Time
2. Open Duration
3. Open/Close
4. Time Record
```

5. When the following screen is displayed, you can enter the month you want (1-12).

```
    Input Month
      (1-12)

        __
```

6. When the following screen is displayed, place your card over the card reader.

```
    Approach
    User Card
```

7. As shown below, you can view working hours and overtime hours for each user.

```
  ID : 740123-1198111
Working Time
##h ##m
OverTime
##h ##m
```