COMMAX

MULTI
ENTRY UNIT

Model No. DRC-MSC/MSB

COMMAX

Blooming Life, HomeNetwork
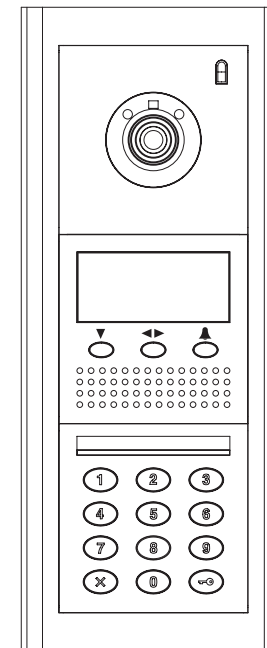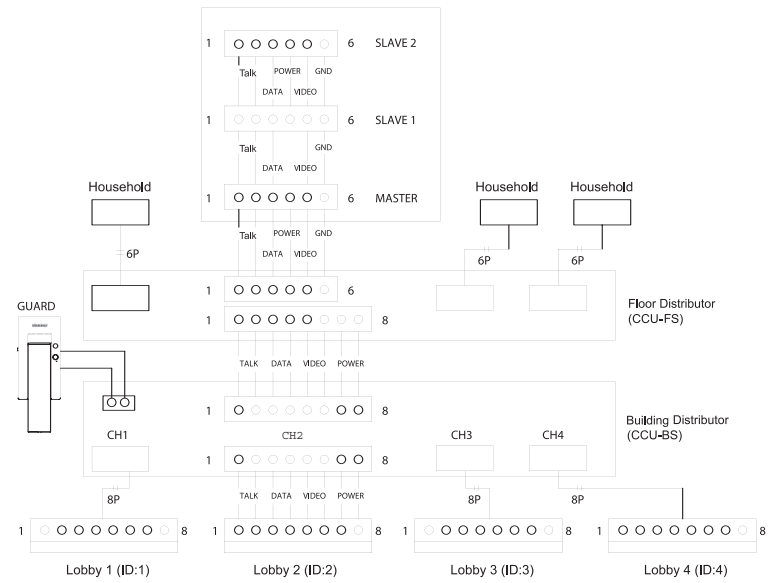
COMMAX Co.,Ltd.

- Thank you for purchasing our COMMAX product.
- Please carefully read this User's Guide (in particular, precautions for safety)
  before using the product and follow the instructions to use your productexactly.
- The company is not responsible for any safety accidents caused in abnormal oper-
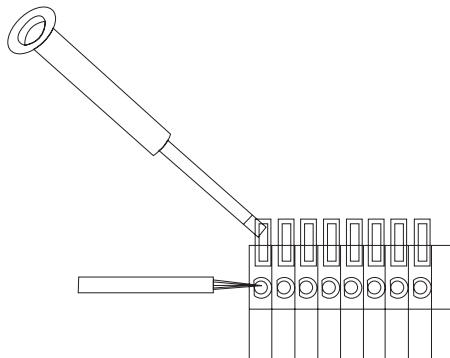 ation of the product.

3)System diagram

![System diagram showing SLAVE 2, SLAVE 1, MASTER connections with Talk, POWER, GND, DATA, VIDEO labels. Household units with 6P connections to Floor Distributor (CCU-FS). GUARD unit with CH1, CH2, CH3, CH4 channels connected to Building Distributor (CCU-BS) with TALK, DATA, VIDEO, POWER labels. 8P connections to Lobby 1 (ID:1), Lobby 2 (ID:2), Lobby 3 (ID:3), Lobby 4 (ID:4).]

13. Specification

Item	Content(DRC-MSC/MSB)
Wiring	To Build Distributor: 8-wire(talk 2, Data 2, Video 2, Power 2)
Power voltage	DC24~DC28V 5A (powered by building distributor)
Transmission Method	Duplex System
Screen dimension	128x64 GRAPHIC LCD
Power requirement	Standby : 60mA Maximum operation: 450mA(Max.)
Distance range (to Build Distributor)	When power source is supplied from Building Distributor. Less than 20m When power source is supplied separately. 20 ~100m
Distance range (to Build Distributor)	5Lux $\pm$ 3 Lux

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2) Wiring

- Please pay attention to the polarity of the wires. Units will not work properly when mis-wired
- When using a UTP(CAT.5) cable, be sure to check the connection of the color of the wires as shown in the picture above.

- Within 20m between Build Distributor and Multi Entry Panel, the power is supplied from the Building Distributor.

- Greater than 20m to less than 100m between Build distributor and Multi entry panel, the Multi Entry Panel requires separate power source (In this case, there is no power line connection between the Build Distributor and the Multi Entry Panel)

- The allotted ID of the Multi Entry Unit should match with the assigned number of the connection terminal of Building Distributor (CCU-BS)

Multi Entry Panel	Build distributor
ID : 1	Terminal 1
ID : 2	Terminal 2
ID : 3	Terminal 3
ID : 4	Terminal 4

- When wiring, please use a tool like a screwdriver.

Table of Contents

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Warnings and caution

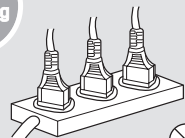◎ **Make sure to follow the instructions to prevent any danger or property losses.**
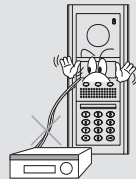

Warning Death or serious injury is expected.

🚫 It indicates prohibition.

🚫 It indicates prohibition of disassembly.

🚫 It indicates prohibition of contact.

❗ It indicates dos and don'ts.

It indicates that the plug should be pulled out from the socket.

Warning

Do not put the plug in the socket simultaneously.
It may generate abnormal heat or cause a fire.

Do not connect to other products while in use.
It may cause breakdown.

Do not forcibly bend the cord or put a heavy object on the product.
It may cause a fire.

Do not use water, thinner or a detergent used to wash oil products when you wash the exterior.
Make sure to wash it by using a dry cloth to prevent any breakdown or electric shock.

Do not install the product in a humid place.
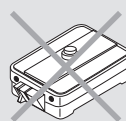It may cause an electric shock or a fire.

Do not forcibly pull out the cord from the socket.
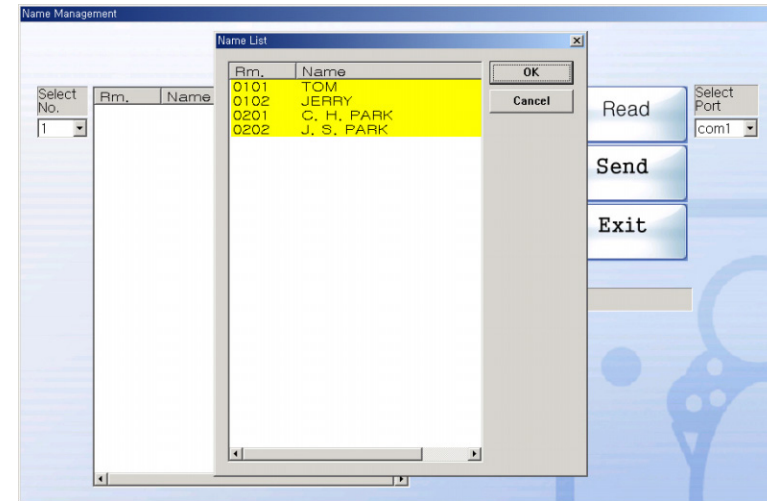If the cord is damaged, it may cause a fire or an electric shock.

Do not put the plug in the socket with a wet hand.
It may cause an electric shock.

Do not disassemble, repair or modify the product.
It may cause a fire, an electric shock or an injury due to malfunction of the product.
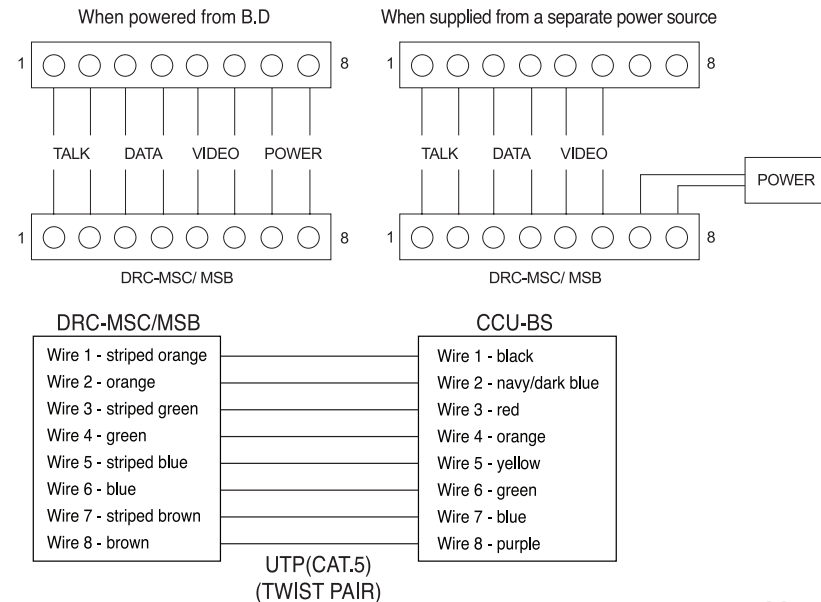
Do not use AC circuit breaker.
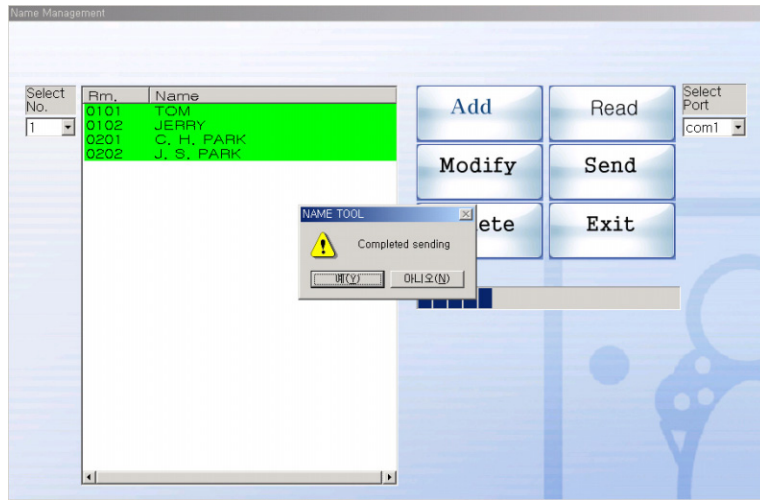It may cause an electric shock.

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17) With this data, you can make use of the "modify", "Add" functions in this program and select " SEND " to complete.

13. Wiring and System Diagram

1) Wiring Diagram

When powered from B.D

When supplied from a separate power source

1 ○○○○○○○○ 8

1 ○○○○○○○○ 8

TALK   DATA   VIDEO   POWER

TALK   DATA   VIDEO

POWER

1 ○○○○○○○○ 8

1 ○○○○○○○○ 8

DRC-MSC/ MSB

DRC-MSC/ MSB

DRC-MSC/MSB	CCU-BS
Wire 1 - striped orange	Wire 1 - black
Wire 2 - orange	Wire 2 - navy/dark blue
Wire 3 - striped green	Wire 3 - red
Wire 4 - green	Wire 4 - orange
Wire 5 - striped blue	Wire 5 - yellow
Wire 6 - blue	Wire 6 - green
Wire 7 - striped brown	Wire 7 - blue
Wire 8 - brown	Wire 8 - purple

UTP(CAT.5)
(TWIST PAIR)

12) "Completed sending" message is displayed as above, select (Y).
  (When "LOBBY Not connected" message is displayed, please recheck the cable
   connection, the Dip switches of the Building Distributor and "Select No." & "Select Port"
   in the program menu while shutting off the Building Distributor.
   Then select " Send " again while the Building Distributor is on.
13) The file of the resident numbers and names stored for Building No.1 is automatically
   saved in the format of AptNo1(e.g.: Building No. 2 —> AptNo 2.TXT) in the same
   temporary folder.
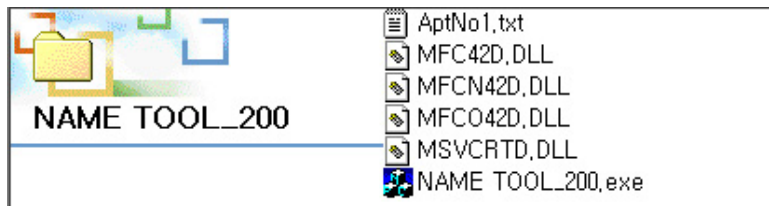
14) Select "Exit" to quit this program.
15) Select "READ" brings the data from existing information of resident numbers and names
   in the Building Distributor as shown in the image below.
16) "Name List" appears when selecting "READ" which is then saved into "Name Management"
   by selecting "OK" (But for example, in case there is existing data stored in the temporary
   folder in the format such as "AptNo1.txt" shown above, "Name list" shown below will not
   take priority to be saved over the existing data, "AptNo1.txt")

Warnings and caution

<table>
<tr><td rowspan="2">⚠ Caution
An injury or property losses are expected</td><td>🚫 It indicates prohibition.</td></tr>
</table>

⚠ **Caution** An injury or property losses are expected

🚫 It indicates prohibition.
It indicates prohibition of disassembly.
It indicates prohibition of contact.
❗ It indicates dos and don'ts.
It indicates that the plug should be pulled out from the socket.

Caution

If the socket holes are larger than normal, do not put the plug.
It may cause an electric shock or a fire.

Make sure that dust or foreign substances are not gathered on the product.

Make sure to prevent foreign substances from entering the product.
It may cause a breakdown.

Do not put a heavy object on the product.
It may cause a breakdown.

Do not disassemble or give an impact to the product.

Avoid direct rays of the sun or heating devices at a time of installation.

Install the product in a flat and stable place.
Otherwise, it may not function properly.

Pull the plug if the product is not used for a long time.

If the product generates strange sound, make sure to pull the plug immediately and contact Commax service center.

1. Features

1) Wiring : 8 wires when including a power source ~
   Simple installation - all wiring can be used with UTP cable(CAT.5)

2) Connect up to 4 Multi Entry Panels per building

3) Connect up to 4 residences per single Floor distributor (CCU-FS)

4) Connect Multi-Entry Panels with Building distributor (CCU-BS)

5) The power source is required for each Multi Entry Panel.(DC24V or DC-28V according
   to the installation distance to Building Distributor.

6) All the in-house units (Color Video Phone, B/W Video Phone or Audio Phone) are
   DC source type products and only the Master Unit is supplied with a power source from
   the Floor Distributor.(CCU-FS) Additional in-house units need a separate power source,
   except for the Audio type in house unit.(AP-5HM)

7) A door Camera unit does not serve as an individual door bell ,but a 2-wire door bell
   type is supported for an individual door.

● Multi-Entry Units

With its slim, aluminum case and tempered glass camera lens, the Multi Entry Panel is
resistant to external impact.
It allows visitors to talk with residences list' for names through the LCD display,
and easily register each residences' name of each building or assigned area into the
Multi Entry Panel through the keypad or a personal computer.
Various selections are available among Video type with keypad (DRC-MSC/MSB),
Video type by buttons(DRC-nSC/nSB) and Audio type (DR-nSB) according to clients' needs.
Using a DRC-MSC (color) entry unit with a black & white videophone unit, as well as
using a DRC-MSB (black & white) entry unit with a color videophone unit, will cause
blurred images.

1) LCD size : 128x 64 (key pad type)

2) Connecting Door Bell type for an individual door.

3) Connectable to up to 4 units per building

4) Night automatic illumination - white LED illumination (built-in Camera)

5) Manual camera angle control

6) Full duplex

7) Power source DC 24V~ DC28V

8) Enter a resident number and name and then select " OK " to enter the next resident
   number and name. (can be entered up to 200 resident numbers and names)
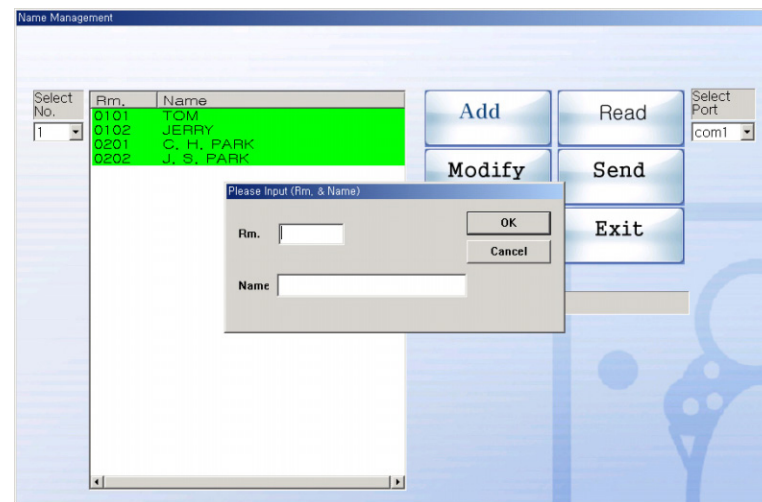

9) Select " Cancel " to quit

10) In order to edit or delete, select the resident number and name among the existing
    list of names as shown above , and Then you can modify through the selection of
    " Modify "or " Delete ".

11) Select " Send " to complete and save this information into the Building Distributor.

3) Set the dip switches of Building Distributor to match its assigned ID.

4) Run "NAME TOOL_200.exe" file.
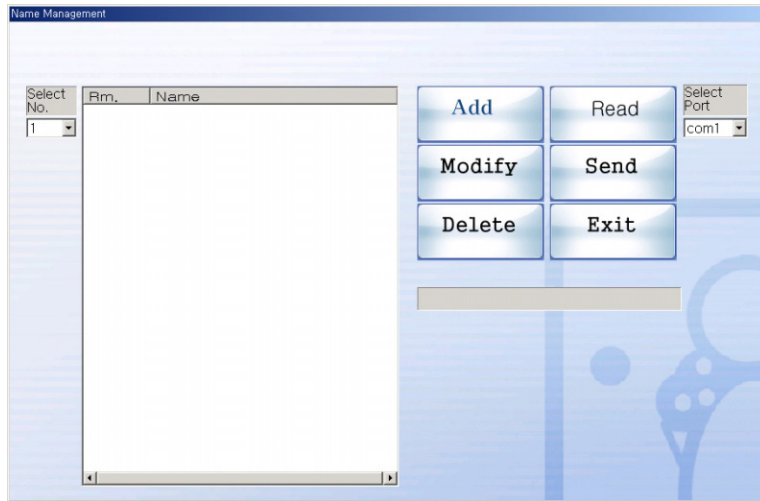
5) Select the Building ID in " Select No ". on the menu.

6) Select the port connecting with the computer in " Select Port "

7) Select " Add " to enter a resident number and name
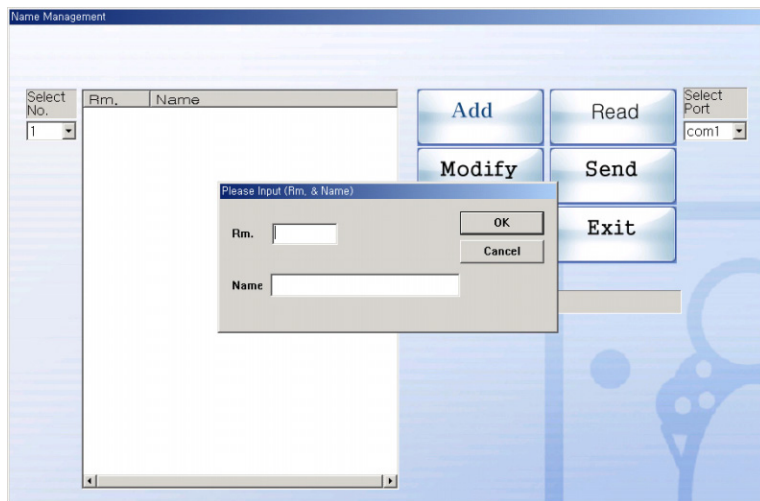
8) Screen display duration lasts for 30 seconds after receiving a call

9) Talking duration time last for 60 seconds.

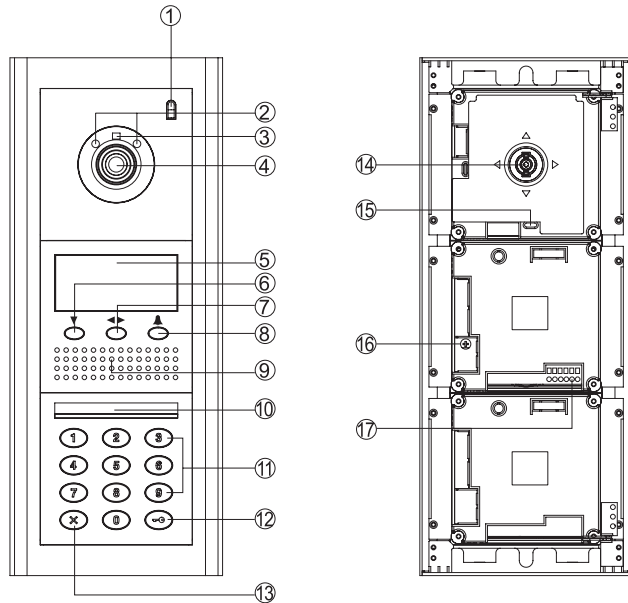10) Temperature limit : -10℃ ~ +40℃

11) Dimension(mm) : 140(W) x 341(H) x44(D)

12) Weight: 1570g
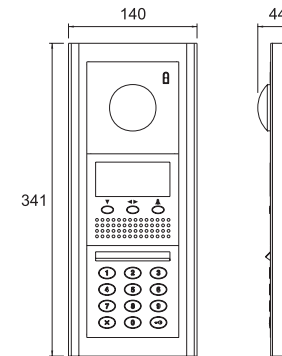
▶**Installation**
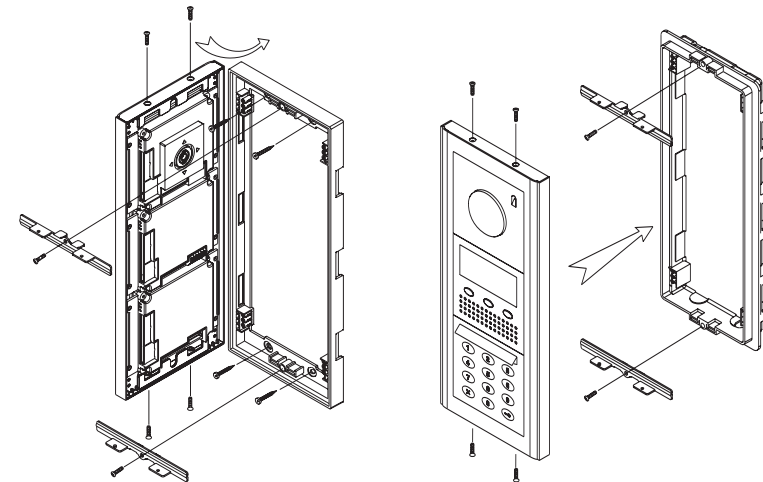
Flush Mount Type   Surface Mount Type

2. Part names and Functions

No.	Contents	No.	Contents
1	C-MIC	10	Power status and Light night lamp
2	Lamp for CCD Camera	11	Dial button
3	CDS Sensor	12	Key
4	CCD Camera	13	Cancel button
5	LCD Display	14	Camera angle control
6	Down button	15	Terminal for door release
7	Right and Left button	16	Volume control for receiving call
8	Call button	17	Connection terminal to CCU-BS
9	Speaker		

This is the Entrance unit that is connectable to up to 4 units with a
Building Distributor(CCU-BS).
It can be connected with the Floor distributor unit(CCU-FS) which connects
4 residence through the Building Distributor (CCU-BS)

11. Connectable Products

1) Building Distributor(CCU-BS) : one Building Distributor is connected to up to
    4 Multi Entry Panels , Outside Distributor, Floor distributor and Audio type guard
    station unit.
    (Building Serial Numbers are allocated to each Buildings Distributor by its Dip Switch)
2) The Floor Distributor(CCU-FS) : one Floor Distributor can connect to up to
    4 residences on each floor.
3) In-house unit: master unit can connect to up to 2 Sub-units per residence.
4) Audio type unit: this unit can be used for external unit to communicate to residences
    such as Guard station through one-way communication.
5) A Program to register residences: resident name is entered in the Building Distributor
    by a personal computer.

12. Resident registration program (NAME TOOL_200)

This program updates through the company web site (WWW.COMMAX.COM)

1) Download " NAME TOOL_200.zip" through COMMAX homepage and expand
   the zip files to a temporary folder.
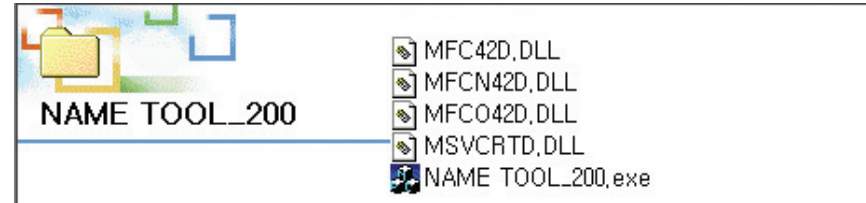
2) Connect the side, D-sub connector of download cable to the serial port of the PC and
    Connect other side , 3P connector to RS232 Port of Building Distributor

10. Changing the password

1) Changing Resident Password

1. Hold "Residence Number" and "Key ⚷ button for 2 seconds and release when LCD stops blinking.
2. Enter "Current password"
3. Hold "Key ⚷ button for 2 seconds and release when LCD stops blinking.
4. Enter "New Password" with 4 digits on Multi Entry Panel displaying "NEW PW : "message.
5. Hold "Key ⚷ button for 2 seconds and release when LCD stops blinking.
6. Repeat "New password" to confirm it.
7. Hold "Key ⚷ " button for 2 seconds and release when LCD stops blinking.

2) Changing Building Password (default password : "4321")

1. Enter "9900" and then hold "Key ⚷ " button for 2 seconds and release when LCD stops blinking.
2. Enter "current password" and then hold "Key ⚷ " button for 2 seconds and release when LCD stops blinking.
3. Enter "New Password" with 4 digits on Muti-Entry Panel displaying "NEW PW : "message.
4. Hold "Key ⚷ " button for 2 seconds and release when LCD stops blinking.
5. Repeat "New password" to confirm it.
6. Hold "Key ⚷ "button for 2 seconds and release when LCD stops blinking.

3) Initialization of building password

* All the information of Building Passwords is stored in the Building Distributor.(CCU-BS)
 1. Shut off the Building Distributor and open the unit's case.
  2. While pressing " SW2 ", turn on the Building Distributor and the password will initialize to " 4321 " and the Lamp will blink for 3 seconds.

3. Calling In-house unite by resident Number

1) Press the buttons according to the residence number and then Press " 🔔 "
2) After the residence answers, you can talk with the in-house unit.
3) "Beep" will sound in the cause of a wrong number,
4) "Line Busy" is indicated on the LCD of Multi Entry panel when already talking with others through the Panel.

4. Calling In-house unite by the listed resident names.

- Register residents' names into the CCU-BS through
 "Programming for register residence list "
- A maximum of 200 names can be registered with up to 18 digits each.
- The name can be strolled through alphabetical order.

1) Press one of [▼], [◀ ▶], [🔔] buttons to display "A" ~ "Z" on LCD to select resident name that you are looking for..

2)Press [▼] to select one of them from "A" to "Z", which includes the resident name that you are looking for.

3)Press [◀ ▶] to scroll to resident name section and Press [▼] to select the resident name that you are looking for.

4)Press [🔔] to call the residence.
* "Line Busy" is indicated on the LCD of the entry panel when it is connecting with the same residence.

5. Calling / talking duration

1) Calling duration lasts for 30 seconds.
2) Talking duration lasts for 60 seconds.
3) Press [X] button to end

6. Open the entrance with PIN Number

1. Opening the common entrance with Household Number

   Note : The doors do not open by default password " 1234 "

   Only after changing default Password to new one, can you use this function.

   1) Press resident number" and "KEY ⊷⊚ button
   2) Press PIN number and the "KEY ⊷⊚ button

   The door opens with the "OPEN" message display on the LCD screen.

2. Opening the common entrance with PIN Number

   1)Enter the number sequence, "9900".

   2)Press the "KEY" button.

   3)Enter the PIN number of a building.

   4)Press the "KEY" button.

   5)If the "OPEN" message appears, the common entrance will open.

7. Setting the ID for Multi-Entry Panel

First set the ID number sequence for the multi-entry unit to "0". After each multi-entry unit has been installed, the user must program the building distributor's channels to corre-spond with each multi-entry unit's ID number, 1 to 4.

(CH1 → ID:1, CH2 → ID:2, CH3 → ID:3, CH4 → ID:1)

If a multi-entry unit's ID is set to "0", then it is in household registration mode.

(If a multi-entry unit's ID is set to "0", it is not in normal operation)

1) Hold "Key ⊷⊚ " button for 2 seconds and then release when the LCD stops blinking.

2) When "Password" message appears on the LCD, enter the password set for the
   Building and press the "Key ⊷⊚ " button.

3) When " ID : " message appear on the LCD, enter the number from 1 to 4 in order.

4) Then press the " Key ⊷⊚ " button to complete ID setting.

8. Setting in-house unit as Master and sub units

• Setup begins from the multi-entry unit connected to channel 1.

• In one household, there should only be one established MASTER multi-entry unit. The remaining units should be set as SLAVE units.

• From the household number registration mode, pressing the "Door release" button sets the unit as MASTER, and pressing the "Extension Call" button sets the unit as SLAVE.

• After completing registration of the household number, set the multi-entry unit's ID number to "1". (If a multi-entry unit's ID is set to "0", it is not in normal operation)

1. Setting Master

1) Set the multi-entry unit's ID number connected to channel 1, to " 0 ".
   (From the household number registration mode)

2) While picking up the handset of an in-house unit, press the "Extension call" button
   and the "door release" button at the same time.

3) You can communicate with the Multi Entry Panel while the resident's number is
   displayed on it.

4) When the "∗∗∗-> M" message is displayed on the Multi Entry Panel when you
   press the "Door release" button on an in-house unit.

5) Then, register the ID of the shown residence, and press " 🔔 " button to hear
   a sound of completion.

6) The registration is complete when you hang up the handset.
   (Repeat this process to register other room numbers.)

7) After completing registration of all household numbers, be sure to set a multi-entry
   unit's ID to "1".

2. Setting the Sub-Unit

1) Set the multi-entry unit's ID connected to channel 1, to "0".
   (From the household number registration mode)

2) While picking up the handset of an in-house unit, press the "Extension call" button
   and the "door release" button at the same time.

3) You can communicate with Multi Entry Panel while the resident's number
   displayed on it.

4) In that status, "∗∗∗-> S "message is displayed on the Multi Entry Panel
   when you press the "Extension call" button on the in-house unit.

5) Then, register the ID of the said residence, and press " 🔔 " button to hear a
   sound of completion.

6) The registration is complete when you hang up the handset.
   (Repeat this process to register other room numbers.)

7) After completing registration of all household numbers, be sure to set a multi-entry
   unit's ID to "1".