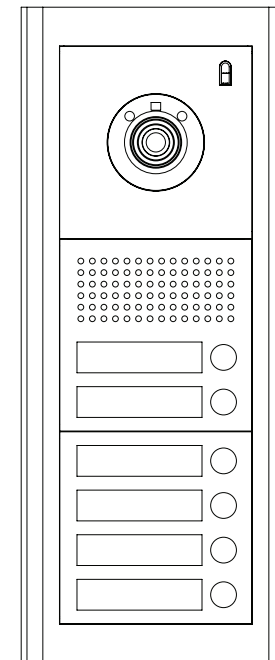




MULTI ENTRY UNIT

Model No. DRC-nSB / nSC



COMMAX Co.,Ltd.

a513-11, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea
Int'l Business Dept. : Tel.; +82-31-7393-540~550 Fax.; +82-31-745-2133
Web site : www.commax.com

Printed In Korea/2007.12

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 product exactly.
- The company is not responsible for any safety accidents caused in abnormal operation of the product.



Table of Contents

Warnings and caution	2
System Special Features	4
Part names and Functions	6
Calling In-house unite by resident Number	7
Calling / Talking Time Duration	7
Multi-Entry Panel (ID) Registration	7
Setting Room Numbers to MASTER, SLAVE Units	8
Other Product Compattibility	9
Resident Registration Program (ButtonAssign.zip)	10
System & Wiring Diagram	12
Specification	14








Warnings and caution

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



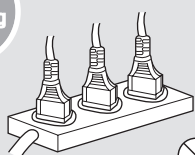
Warning

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.

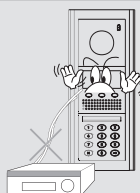


Warning



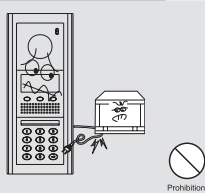
Do not put the plug in the socket simultaneously.

It may generate abnormal heat or cause a fire.



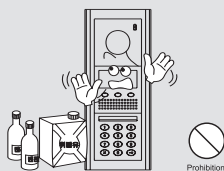
Do not connect to other products while in use.

It may cause breakdown.



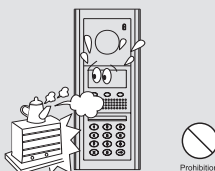
Do not forcibly bend the cord or put a heavy object on the product.

It may cause a fire.



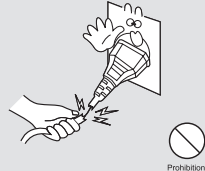
Do not use water, thinner or a detergent used to wash oil products when you wash the exterior.

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.



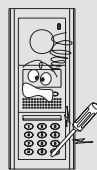
Do not forcibly pull out the cord from the socket.

If the cord is damaged, it may cause a fire or an electric shock.



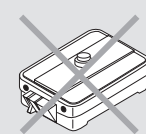
Do not put the plug in the socket with a wet hand.

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.








Warnings and caution



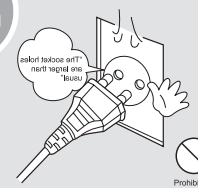
Caution

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.

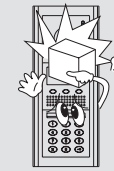


Make sure that dust or foreign substances are not gathered on the product.



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.

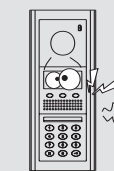


Install the product in a flat and stable place.

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. System Special Features

● COMMAX Entrance System (DRC-nSB / nSC)

- 1) Wiring: 8 wires when including a separate power source
[Simple installation - All wiring can be used with one UTP cable (CAT.5)]
- 2) Connect up to 4 Multi-Entry Panels per building.
- 3) Maximum of 4 units per floor can be supported.
- 4) Connect up to 3 in-house units, including the Master unit, per residence (Inter-connect among Color videophones, B/W videophones, and audiophones according to customers' preferences)
- 5) Connect up to 4 residence units with one floor distributor (CCU-FS) per floor.
- 6) Connect all Multi-Entry Panels with one Building distributor (CCU-BD)
- 7) Multi-Entry panels require a power source of DC24V and DC28V if a separate power supply is needed to support more installation distance.
- 8) All in-house units (Color videophone, B/W videophone, or audio-phone) are DC power type products and only the master unit is supplied with a power source from the floor distributor (CCU-FS) but Additional in-house units require a separate power source, except for the audio-type in-house unit (AP-5HM)
- 9) A door camera unit does not serve as an individual door bell. A 2-wire, chime type, door unit without camera is needed to support the doorbell function.

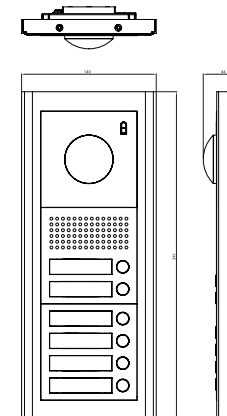
● COMMAX Entrance Unit

With its slim and aluminum case, the COMMAX Multi-Entry Panel is resistant to external impact.

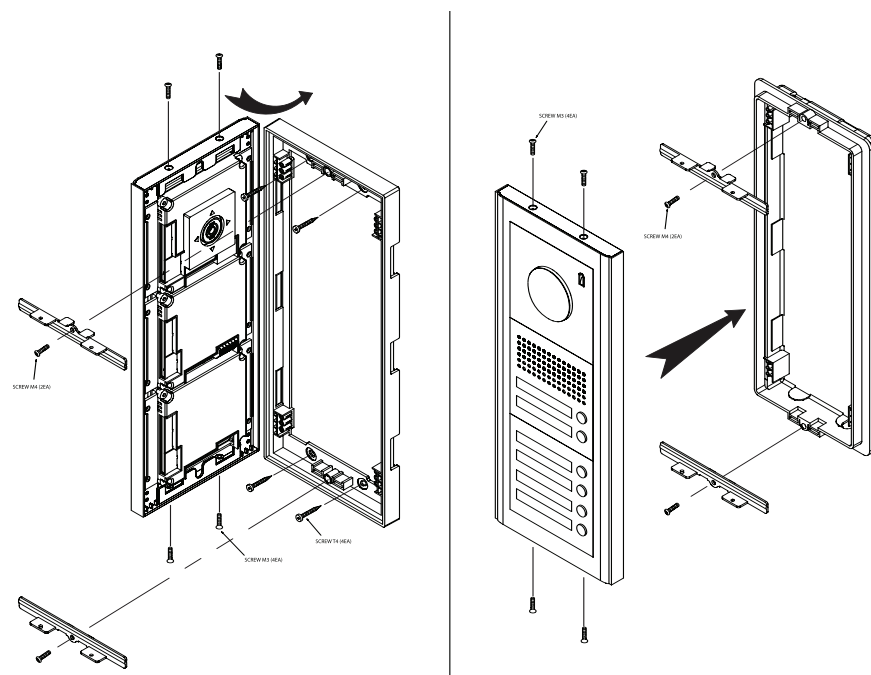
The name card slots allow visitors to easily search and call the according residence unit. This is also a Multi-Entry Panel that supports camera, interphone, and key-button functionality.

- 1) The combination of using an In-house color video phone ,B/W video phone or Audio type interphone is compatible with both types of multi entry panels.
- 2) Door release function
- 3) Up to 4 multi-entry panel units can be connected per building.

- 4) Automatic nighttime illumination feature (built-in)
- 5) Camera angle adjustable(manual operation)
- 6) 2-way Hands-free call configuration.
- 7) Power source DC24V ~ DC28V
- 8) Call and video appearance duration lasts for 30 seconds.
- 9) Talking duration with another room units lasts for 1 minute.
- 10) Temperature limits: -10°... ~ +40°...
- 11) Dimensions: 140(W) x 341(H) x 44(D)

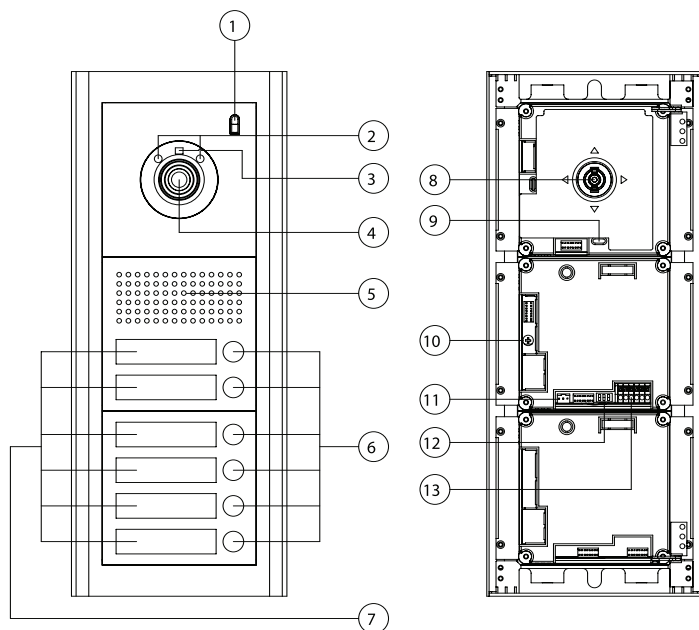


► Installation





2. Part names and Functions



No.	PART NAME	No.	PART NAME
1	C-MIC	8	Camera Angle adjusting knob
2	CCD Camera Lamp	9	Connection terminal for Door Release
3	CDS Sensor	10	Volume control
4	CCD Camera	11	RS-232 Program Download Terminal
5	Speaker	12	Entry Panel ID setup dipswitch
6	Call Button	13	Connection to terminal to CCU-BS
7	Name Card		

This is a video, button-type Multi-Entry unit connected to a building distributor (CCU-BS) that can support up to 4 Multi-Entry units. It is also connected to the floor distributor (CCU-FS), also powered by the CCU-BS, which can connect 4 residences.



3. Calling In-house unite by resident Number

- 1) Press the according button corresponding with the desired residence wished to be called.
- 2) After the residence unit answers, conversation with the in-house unit can occur.
- 3) A “line busy” tone will sound if the residence unit is communicating with another entrance panel unit.



4. Call / Talk Time Duration

- 1) Call duration lasts for 30 seconds.
- 2) Conversation duration lasts for 60 seconds.
- 3) If you wish to end a call/conversation, press the Call Button once more.

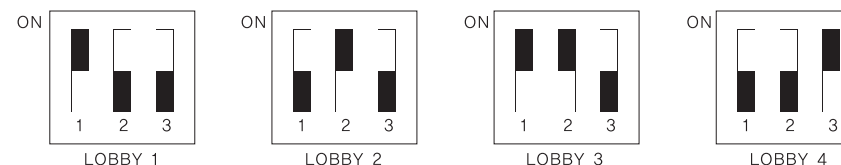


5. Multi-Entry Panel (ID) Registration

First set the ID number sequence for the multi-entry unit to “0”. After each multi-entry panel has been installed, the user must program the building distributor's channels to correspond with each multi-entry units' ID number, 1 to 4.
(CH1 → ID:1, CH2 → ID:2, CH3 → ID:3, CH4 → ID:4)

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”, then it is not in normal operation.)

- 1) On the back of the panel unit, you will find the DIP Switch board.
- 2) A multi-entry panel using the DIP Switches can be assigned from 1 to 3.
- 3) When all 4-multi entry panels are installed, Dip switches setting for each panel is as follows.





6. Setting Room Numbers to MASTER, SLAVE Units

- Setup will be established from the multi-entry panel connected to Channel 1.
- In one room or household, there should only be one established MASTER multi-entry unit. The remaining units should be set as SLAVE units.
- Household
From the room number registration 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 room number, set the multi-entry unit's ID to "1".
(If a multi-entry unit's ID is set to "0", it is not in normal operation)

1. Setting the MASTER Unit

- 1) Set the ID to "0" for the multi-entry panel connected to Channel 1.
(For room number registration mode)
- 2) While picking up the handset of the in-house videophone, press the "Extension Call" and the "Door Release" buttons at the same time.
- 3) Automatic communication is established between the multi-entry panel and the in-house unit.
- 4) Then, press the "Door Release" button on the videophone while the call is being made and an extended "bee" will sound signifying registration.
At this time, press the assigned household number from the multi-entry panel.
Three, successive, beeps will sound to confirm successful registration.
- 5) Once the call is ended, the registration is complete.
(Repeat this process to register other room numbers.)
- 6) After registration is complete for all households, set the ID for each multi-entry panel to "1".

2. Setting the SLAVE Unit

- 1) Set the ID to "0" for the multi-entry panel connected to Channel 1.
(For room number registration mode)
- 2) From the in-house unit, pickup the handset and press the Extension Call button and the Door Release button at the same time.
- 3) Automatic communication is established between the multi-entry panel and the in-house unit.
- 4) Then, press the "Extension Call" button on the videophone while the call is being made and an extended "bee" will sound signifying registration.
At this time, press the assigned household number from the multi-entry panel.
Three, successive, beeps will sound to confirm successful registration.
- 5) Once the call is ended, the registration is complete.
(Repeat this process to register other room numbers.)
- 6) After registration is complete for all households, set the ID for each multi-entry panel to "1".



7. Other Product Compatibility

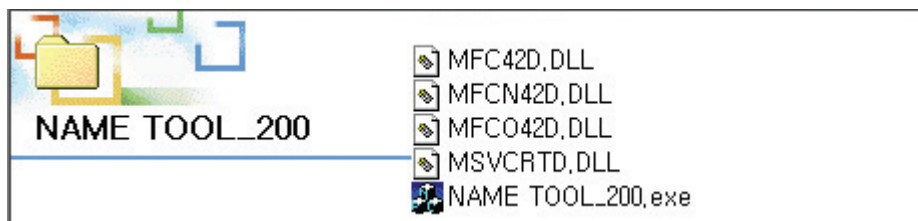
- 1) Building Distributor: One Building distributor can be connected to up to 4 multi-entry panel units, outside distributor, floor distributor, GUARD or porter
(Dip switch setting number in a Building Distributor corresponds to its build number)
- 2) Floor Distributor: One floor distributor can be connectable up to 4 household units per floor.
- 3) In-house Unit: A total of 2 in-house units, one MASTER unit and one SLAVE unit, are connectable.
- 4) Guard (porter): From the in-house unit to the GUARD porter, call and communication are possible.
(The GUARD porter is only capable of receiving incoming calls and CANNOT make outgoing calls to individual rooms.)



8. Resident Registration Program (ButtonAssign.zip)

This program is often updated through the company website (www.commax.com)

- 1) Download the "ButtonAssign.zip" file available on the Commax homepage and expand the zip files to a temporary folder.

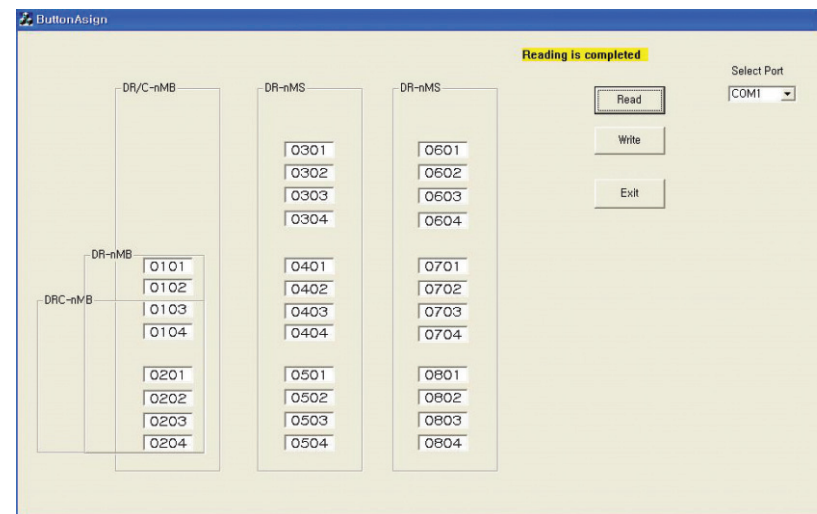


- 2) Connect the COM1 from the PC to the DRC-nSB's CN7 port, using a 232 cable.



- 3) Be sure that the DRC-nSB (Button-type Multi-Entry Panel) is powered on.
- 4) Run the "ButtonAssign.exe" file.

Button Assignment Screen



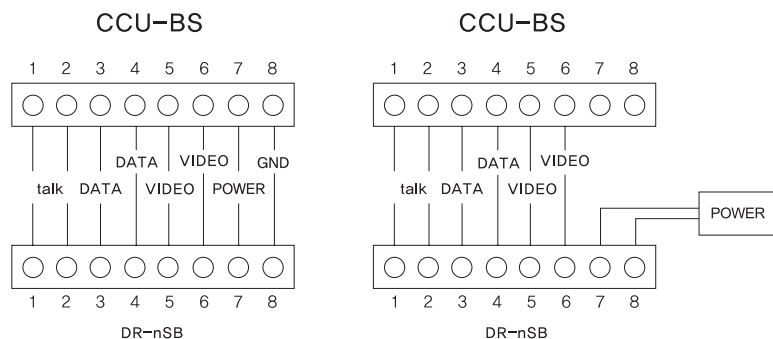
- 5) As seen in the image above, from the top right tab "Select Port", select the port that is connected with the user's computer (COM1).
- 6) Then click the "Read" button, to display the registered household numbers, as seen in the screen above.
- 7) Clicking the "Default" button will reset the registered settings to the configuration shown in the image above.
- 8) The user is free to input different household numbers and alter existing registered numbers, as desired.



9. System & Wiring Diagram

1) Wiring Diagram

(Power source from building distributor) (Multi-Entry Panel powered separately)

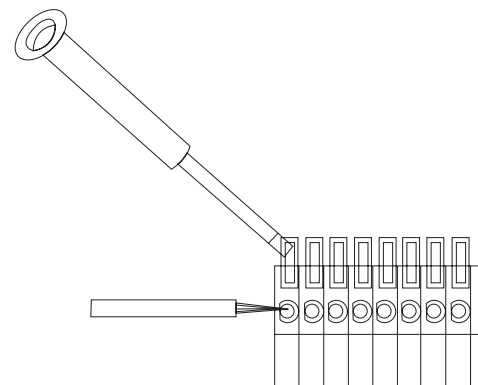


2) Wiring

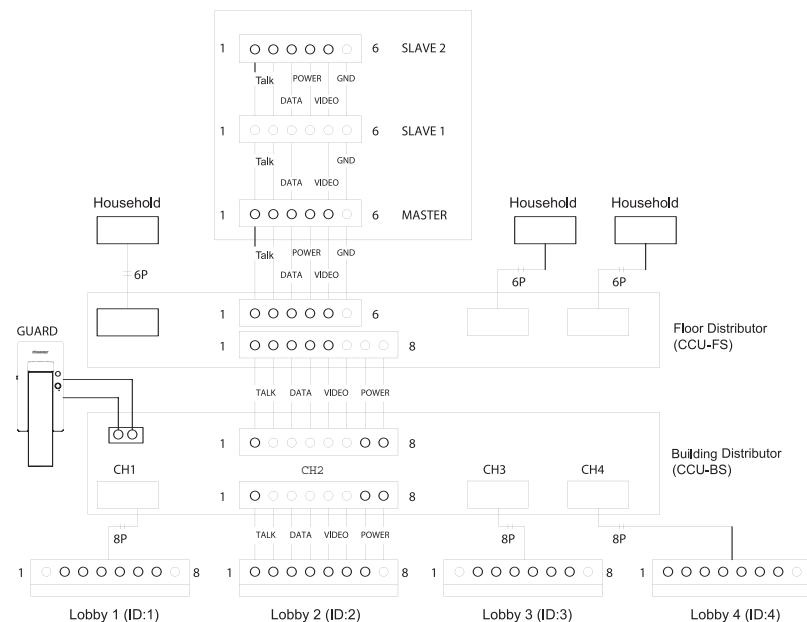
- Please pay attention to the polarity of the wires. Units will not work properly when mis-wired.
- If the distance between the building distributor and the Multi-Entry Panel is within 20m, the power is supplied from the building distributor.
If the distance between the building distributor and the Multi-Entry panel is greater than 20m, a separate power source (RF-1A for Audio-type Multi-Entry Panels) is required. The maximum extended distance range cannot exceed 100m. (In the case of using a separate power source, there is no power line connection between the building distributor and the Multi-Entry Panel units)
- The allotted ID of the Multi-Entry Unit should match with the assigned number of the connection terminal of the building distributor (CCU-BD) as follows.

Multi Entry Panel	Bld. Distributor
ID : 1	CH 1
ID : 2	CH 2
ID : 3	CH 3
ID : 4	CH 4

- When wiring, please use a tool similar to a screwdriver.



3) System Diagram





13. Specification

Item	Content(DRC-nSB / nSC)	
Wiring	To Bld. Distributor : 8-wire (TALK-2, DATA-2, VIDEO-2, POWER-2)	
Power voltage	DC24V~DC28V 5A (supplied from building distributor)	
Transmission Method	Duplex System	
Screen Dimension	N / A	
Power requirement	Standby : 80mA	
	Maximum Operation: 295mA	
Distance Range (to Bld. Distributor)	When power is supplied from Bld. Distributor.	20m
	When power is supplied separately (RF-2A)	20m ~ 100m
CCD Lamp operation	5LUX \pm 3LUX	



Memo



Memo