

# Open Voice Intercom System

Model No. CM-810M

**COMMAX**  
Blooming Life, HomeNetwork**COMMAX Co.,Ltd.**

513-11, 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](http://www.commax.com)

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**COMMAX Co.,Ltd.**

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

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	Instructions for users
Level-B product	The product is registered for electromagnetic compatibility for household use and can be used in all areas including residential areas.

## 1. Greetings

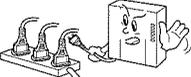
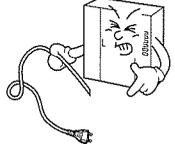
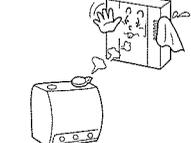
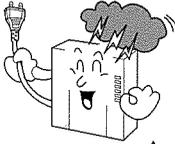
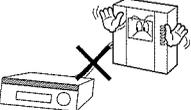
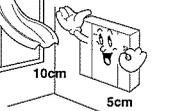
- \* Thank you very much for purchasing of COMMAX products.
- \* Please read carefully this user manual and follow its rules.
- \* This intercom can be used in offices, and shopping outlets, and provide convenience to use communication on long distances.

## 2. Warnings and caution

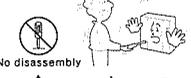
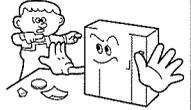
Please follow the things described below in order to prevent any danger or property damage.

 <p><b>Warning</b> It may cause a serious damage or injury if violated.</p>	<ul style="list-style-type: none"> <li> Prohibition.</li> <li> No disassembly</li> <li> No touch</li> <li> Must follow strictly.</li> <li> Shows plugging out the power cord without an exception</li> <li> Shows the warning and caution for an electric shock.</li> <li> Shows the warning and caution for a fire.</li> </ul>
 <p><b>Caution</b> It may cause a minor damage or injury if violated.</p>	

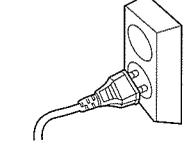
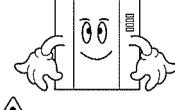
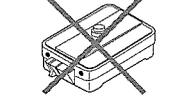
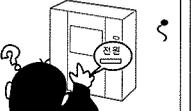
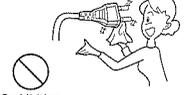
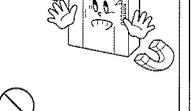
### Warning

<p>Please don't use several products at the same time on one power socket. · It may cause a fire due to an abnormal overheating.</p>  <p>Prohibition Fire</p>	<p>Please don't bend the power cable excessively or it may cause an electric shock. · fire when using a damaged power cable.</p>  <p>Prohibition Electric shock Fire</p>	<p>Please don't handle the power cable with a wet hand. · It may cause an electric shock.</p>  <p>Prohibition Fire</p>	<p>Please plug out the power cable from the socket when not using it for a long period of time. · It may shorten the product lifespan or cause a fire.</p>  <p>Request Fire</p>
<p>Please don't install the product in the place where there is much oil, smoke or humidity. · It may cause an electric shock or fire.</p>  <p>Prohibition Electric shock Fire</p>	<p>Please don't install the product with the lightning and thunder. · It may cause an electric shock or fire.</p>  <p>Prohibition Electric shock Fire</p>	<p>Please don't use and connect this product with other products with different rated voltage. · It may cause a disorder or fire.</p>  <p>Prohibition Fire</p>	<p>When installing the product that generates heat, please install the product away from the wall (10cm) for the ventilation. · It may cause a fire due to the increased internal temperature.</p>  <p>Prohibition Fire</p>

### Warning

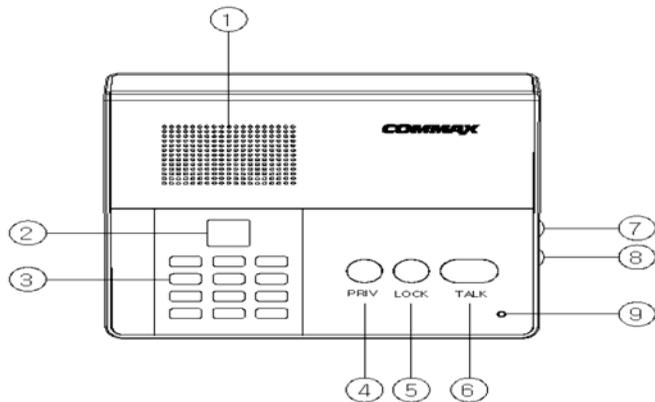
<p>Please don't disassemble, repair or rebuild this product arbitrarily (please contact the service center if a repair is needed). · It may cause an electric shock or fire.</p>  <p>No disassembly Electric shock Fire Unplug</p>	<p>If an abnormal sound, burning smell or smoke is coming out of the product, please plug out the power cable and contact a service center. · It may cause an electric shock or fire.</p>  <p>Electric shock Fire</p>	<p>Please don't insert any metallic or burnable materials into the ventilation hole. · It may cause an electric shock or fire.</p>  <p>Prohibition Electric shock Fire</p>	<p>Please use only the designated batteries for the products of using DC power. · It may cause an electric shock or fire.</p>  <p>Request</p>
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### Caution

<p>Please plug the power cable firmly into the inner end. · It may cause a fire.</p>  <p>Request Fire</p>	<p>Please hold the plug tightly when unplugging the power cable (a part of the copper wire may be disconnected if the grabbing is only made on the cord when pulling out the cable). · It may cause an electric shock or fire.</p>  <p>Request Electric shock Fire</p>	<p>When connecting the power cables after cutting the cable, please install the product with power off. · It may cause an electric shock or fire.</p>  <p>Request Electric shock Fire</p>	<p>When installing the product, please fix it firmly while using the wall-mounting unit and screws. · It may cause an injury from the falling object.</p>  <p>Request</p>
<p>Please be careful when using an AC circuit breaker since there is a possibility of an electric shock.</p>  <p>Request Electric shock</p>	<p>Please check the use voltage and current for the DC-only products and use the appropriate rectifier. · It may cause a fire.</p>  <p>Request Fire</p>	<p>Please avoid direct rays of the sun or heating devices at a time of installation. · It may cause a fire.</p>  <p>Request Overheating Fire</p>	<p>Please don't install the product on an unstable place or small support board. · It may cause an injury if it falls down while in use.</p>  <p>Request</p>
<p>When cleaning the product, please rub it with a soft and dry cloth after plugging out the power cable. (Please don't use any chemical products such as wax, benzene, alcohol or cleanser.)</p>  <p>Prohibition</p>	<p>Please don't drop the product on the ground and don't apply a shock. · It may cause a failure.</p>  <p>Prohibition</p>	<p>Please use the designated connection cable within the maximum calling distance designated for the product. · It may reduce the product performance.</p>  <p>Request</p>	

### 3. Names and function of each part

#### 3-1 Name of each part of CM-810M



NO	Description
①	Speaker
②	FND display unit
③	Ten key
④	PRIVACY function
⑤	LOCK(Hands-free communication)
⑥	TALK(Conversation)
⑦	Receiver Volume Control
⑧	Call Sound Volume Control Dial
⑨	MIC

- Receiver Volume Control: Regulating of voice of opponent, coming from outside.
- Calling Out Volume Control: it regulates volume of calling sound.
- PRIVACY Button: when this button is pushed, even under communication, voice of this person will not be transmitted to the other party. (preventing of eavesdropping is possible)

As CM-810M does not have a handset, you should press "Talk" button, during conversation, and press again one more time "Talk" button in order to finish conversation.

### 4. Operational functions

#### 4-1 Setting methods before usage and precautions

##### 1) Setting of Melody ID

- If you press for 2 seconds button "\*", beep voice will sound and bell sound will enter setting mode.
- Word "Sd (SOUND)" will be shown in Display window, and current number of melody (initial number: 01) will flicker.
- At this moment, if you press 1 or 2, appropriate melody will be in effect.
- After melody is selected, push button "#" and finish melody selection.
- By pressing melody selection and button "#", device will be automatically enter to ID setting mode
- ID in display window, and current ID (initial number: 01) will be sequentially flickered.
- After setting of ID is done, press "#" and setting for use will be over.

##### 2) Precautions

- Setting of ID should be done from 1 to 10 according to wiring state.
- In order to go over among Melody and ID setting, press "\*".  
(Example): For setting only ID : pressing about 2 seconds "\*" + button "\*" + set ID number + button "#"  
For setting only melody: pressing about 2 seconds "\*" + Number of setting melody + button "\*" + button "#"
- After entering into setting mode, if you do not press any button for 10 seconds, it will automatically go to initial state.

#### 5-2 Master Station\_CM-810M How to use, guidelines for CM-810M

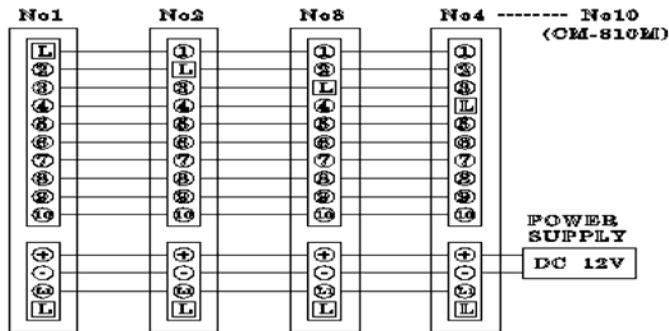
##### \*\* When you want to call and begin to talk

- 1) Press ID number of device to be called and then press button "#".
- 2) If bell lasts over 1.5 seconds, conversation mode automatically opens.  
Example: Calling to ID number 1: press "1 + #" (Bell sound will occur)"
- When you press wrong number, error beep sound will occur. (It is possible to call from 1 to 10, and impossible to call into its ID number).
- When you enter wrong number, press "\*" and it will be annulated.
- 3) When calling, press Talk button and speak, release Talk Button, when listening.  
When talking is over, press again button "#," and finish conversation.

##### \*\* When you are called from other unit and want to speak

- 1) If there is a call coming from another unit, you will see in display window "A(call)" words appear, after 1.5 seconds it get automatically in to speaking mode with appearing of "N" in display.
- 2) During of transmission it is possible to talk without handling any button.
- 3) If you press privacy button, it will be impossible to make eavesdropping over master unit.

## 5. Wiring



### 5-1 Wiring method

- This product use LINE CORD terminal for wiring.

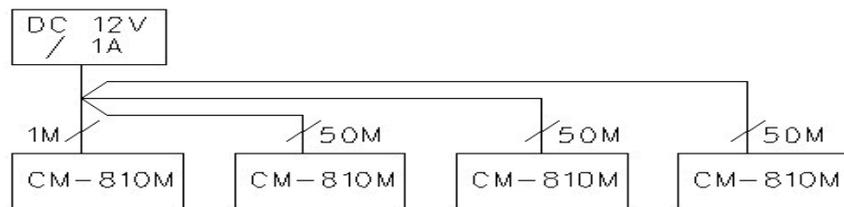
- 1) Terminal 10P: It connects with LINE CORD 10P CONNECTOR. Number of this unit will be connected to terminal "L".
- 2) Terminal 4P : It connects with LINE CORD 4P CONNECTOR. (+ , - , L1 , L )

\*\* It is recommended to use Adaptor 12V Trans Type.

## 6. Power Specifications

This product's composition schema is different by distance of power supply units and quantity of installing intercom units.

### 6-1 When we use only one RF-1A(DC12V/1A) (distance 50M)



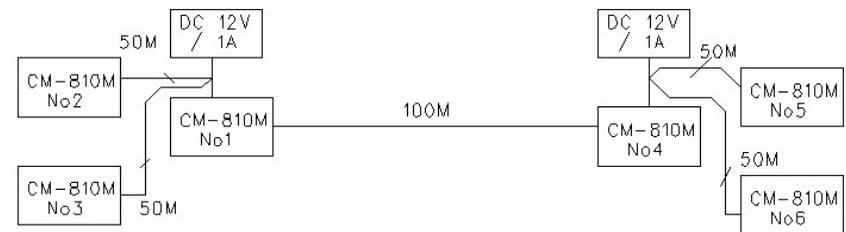
- In case of usage of 12V/1A as it is in picture, maximum 4 units will be connected.
- It is needed to wire adaptor and first CM-810M at maximum closest way within 1 meter.
- It will possible to wire in parallel way by every 50 meters.

### 6-2 When we use only one RF-1A(DC12V/1A) (Distance 100M)



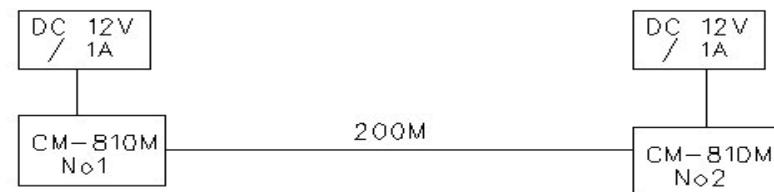
- It is needed to wire adaptor and first CM-810M at maximum closest way within 1 meter.
- A distance between first and second units of CM-810M will be about 100 meters.

### 6-3 When we use two RF-1A (DC12V/1A). (Distance 50M / 100M)



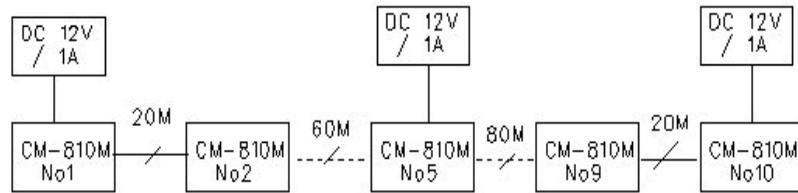
- It is needed to wire as closest as possible first CM-810M with power within 1 meter.
- Second and third CM-810M should be connected to each other in parallel way and installed in every 50 meters.
- After installing first CM-810M unit in 100 meters distance from fourth CM-810M unit, turn on second power supply.
- Place fourth unit of CM-810M maximum close to the power supply unit, within 1 meter.
- Place fifth and sixth CM-810M units by 50 meters distance from each other in parallel way.

### 6-4 When we use 2 pieces RF-1A(DC12V/1A) (distance 200M at maximum)



- Place first CM-810M and power supply unit within 1 meter in wiring.
- Please place first CM-810M and second CM-810M within 200M distance and turn on the power.
- Please install second CM-810M Unit and power supply unit within 1 meter.

### 6-5 When we use 3 pieces of RF-1A(DC12V/1A) (distance 20M)



- Make wiring distance between first unit of CM-810M and power supply unit within 1 meter.
- Place every CM-810M from first unit to tenth unit, putting them by 20 meters respectively between every unit.
- Turn on second power supply unit, connecting it to fifth CM-810M Unit, which is placed in middle of this structure.
- Wire fifth CM-810M unit by placing it from power unit within 1 meter.
- Turn on third power unit connecting it to the last CM-810M.
- Wire power unit with the last CM-810M within 1 meter.

## 7. Specifications and features

### 7-1 Technical Specifications

Item	Description
Wire	CM-810M : 14 wires (Talking 10 wires, Power 2 wires, L & L1)
Power Source	DC12V 1A / RF-1A
Transmission way	Half duplex communication
Display Unit	FND
Power Consumption	Stand by : 50mA Maximum : 100mA
Communication Distance	Maximum 200m ( $\phi$ 0.65mm)

### 7-2 Features

- 1) Master between master communication.
- 2) Nice voice quality.
- 3) Hands-free communication.
- 4) High degree of sensitivity.
- 5) Privacy function prevents eavesdropping from others in the intercom system.
- 6) Offered with 3-call, 5-call channels(supporting up 6, or 10 stations).
- 7) Notify you of incoming calls with an electronic tone and an LED that indicates calling station.
- 8) Build your system with one or more master stations up to 10stations.