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**COMMAX**

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## User Manual

**VIDEO DOOR PHONE CAV-51AM**

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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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# 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.



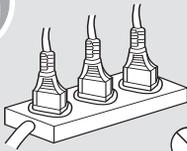
It indicates dos and don'ts.



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

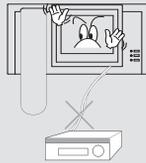


**Warning**



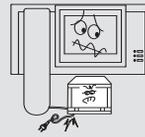
**Do not put the plug in the socket simultaneously.**

It may generate abnormal heat or cause a fire.



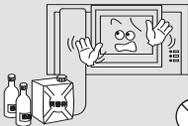
**Do not connect to other products while in use.**

It may cause breakdown.



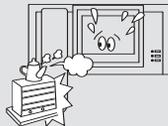
**Do not forcibly bend the cord or put a heavy object on the product.**

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.



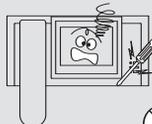
**Do not forcibly pull out the cord from the socket.**

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



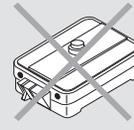
**Do not put the plug in the socket with a wet hand.**

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.



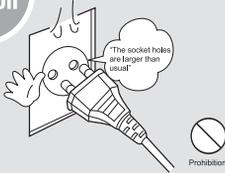
It indicates dos and don'ts.



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

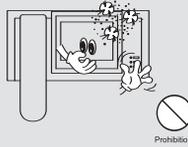


## Caution

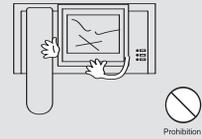


**If the socket holes are larger than normal, do not put the plug.**

It may cause an electric shock or a fire.

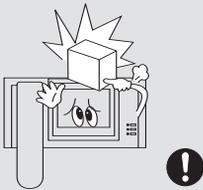


**Make sure that dust or foreign substances are not gathered on the product.**



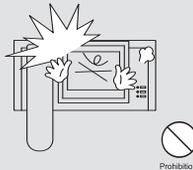
**Make sure to prevent foreign substances from entering the product.**

It may cause a breakdown.

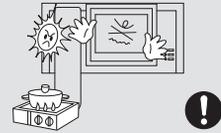


**Do not put a heavy object on the product.**

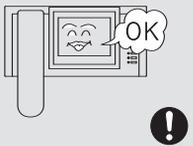
It may cause a breakdown.



**Do not disassemble or give an impact to the product.**

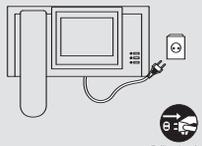


**Avoid direct rays of the sun or heating devices at a time of installation.**

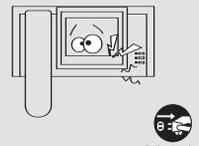


**Install the product in a flat and stable place.**

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. Features

CAV-51AM is a hands free type Color Video phone.

This model can add up to a maximum of 2 sub-units and total 3 units is available in each residence.

And this is a surface mount type video phone that connects to a lobby phone (common entry unit) through a Floor Distributor (CCU-FS) and Building Distributor(CCU-BS).

Each Floor Distributor covers 4 households and one Building Distributor covers 200 households(50EA of CCU-FS) in each building.

This model is a hands free type.

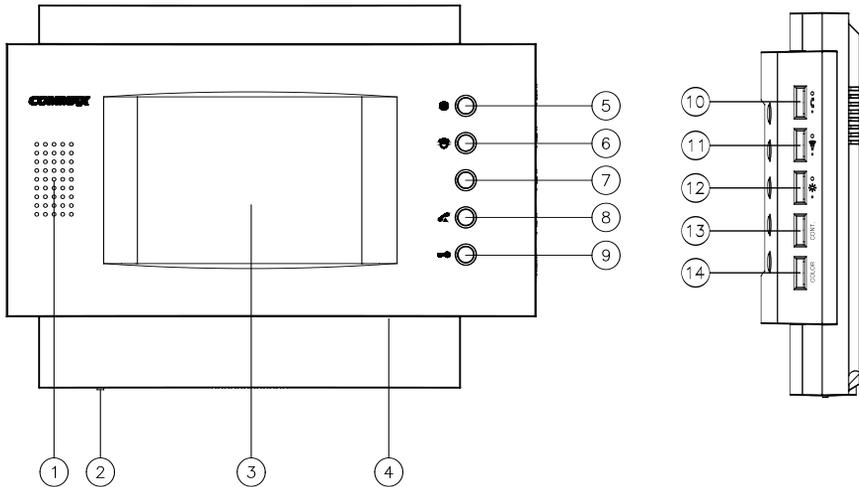
You can talk with a visitor by pushing a “Talk” button and pushing the “Talk” button again to end the conversation.

Communication will be ended automatically when a visitor cancels the conversation.

- 1) DC type Color video phone based on Floor Distributor (Hands free type)
- 2) When installing only 1 master unit per household, power source up to 32 units is supplied from a Floor Distributor (CCU-FS) without an additional power supply.
- 3) Sub-monitors need extra power source.
- 4) 5" TFT LCD Monitor
- 5) This model has 4 buttons. “Porter (Guard station) call”, “Door release”, “Talk” and “Extension call”.
- 6) COMMAX chime (Sol, Mi, Do) is the ring tone that sounds from Multi Entry Panel. “Ding-Dong” sounds from an individual door when there is a call.
- 7) Door release function for Entry panel.
- 8) 6 wires including a power line; one UTP Cable (CAT.5) can be used



## 2. Parts Names & Functions



| No | Details               | No | Details                              |
|----|-----------------------|----|--------------------------------------|
| 1  | Speaker               | 8  | Talk button                          |
| 2  | Power switch          | 9  | Door release button and a Power Lamp |
| 3  | LCD                   | 10 | Volume control dial                  |
| 4  | C-MIC                 | 11 | Call sound volume control dial       |
| 5  | Extension call button | 12 | Video brightness control dial        |
| 6  | Porter call button    | 13 | Contrast Control dial                |
| 7  | Extra button          | 14 | Hue Control dial                     |



## 3. Receiving a call from Multi Entry Panel

- 1) When receiving a call from the Multi-Entry Panel, you will hear the COMMAX chime and the visitor's image will be shown on the screen.
- 2) Pushing a "Talk" button to make a conversation.
- 3) Pressing "Door release" button to open the common entrance during a conversation. (The door get opened with electric sound and the communication is completed). (The conversation is ended right after the release of the door)
- 4) When conversation is over without door release, push a "Talk" button to end the conversation.



## 4. Calling sub units (Intercommunication)

- 1) Press the “Talk” and “Extension” call button in turn to make a call to the sub unit.  
(All call to both Master and Slave unit)
- 2) When the sub unit responds, conversation occurs.  
(When trying to call the Guard station or other sub units during intercommunication, nothing happens.)
- 3) During extension call, if a call made from Multi Entry panel , you have the image of visitor with lower call sound.( talk duration is 30 seconds)
- 4) Start conversion with Multi Entry panel after ending extension call.  
(Only one extension can have a conversation with Multi-Entry panel at a time)



## 5. Calling Guard(or Porter)

- 1) Press the “Talk” and “Guard” call button in turn to make a call to the Guard Station.
- 2) When the guard station responds, conversation occurs.
  - The Guard station unit does not have an outgoing calling function, it can only receive calls
  - If the Guard unit is on the line with another residence or Multi entry unit, you will hear a busy tone)



## 6. Call / Talk duration

This is applied to all calls and conversation.

- 1) Calling time lasts for 30 seconds.
- 2) Talking duration lasts for 60 seconds.



## 7. Setting In-House unit as a Master and Sub Units.

This setting should be set by the Multi Entry Panel which should be connected to channel 1 of CCU-BS.

- A. When a single unit is installed in a household, it should be set as a master unit.  
(In case more than 2 units are installed in a household, one of them should be set as a master, and the rest should be set as slave units.)
- B. The “Door Release” and “Extension call” button on the unit run as a selection of a mater or slave unit in this setting mode.

## 1. Set in-house unit as a master unit.

- 1) Set the ID as "0" on the Multi Entry Panels that should be connected to channel 1 of CCU-BS.
- 2) After pressing the "Talk" button 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 a screen of multi entry panel.
- 4) Press the "Door release" button on an in-house unit then the "\*\*\*\* -> M" message is displayed on the Multi Entry Panel. Register desired household number in Multi Entry unit, and then press " " button. The electric sound will be heard after completion.
- 5) The registration is complete when you cancel the conversation.  
(Repeat this process for other residence's registration.)
- 6) Set the ID on the multi-entry panel as "1" from "0" after completing the registration.

## 2. Set in-house unit as a slave unit.

- 1) Set the ID as "0" on the Multi Entry Panels that should be connected to channel 1 of CCU-BS.
- 2) After pressing the "Talk" button 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 a screen of multi entry panel.
- 4) Press the "Extension" Call button on an in-house unit then the "\*\*\*\* -> S" message is displayed on the Multi Entry Panel. Register desired household number in Multi Entry unit, and then press " " button.
- 5) The electric sound will be heard after completion
- 6) The registration is complete when you cancel the conversation.  
(Repeat this process for other residence's registration.)
- 7) Set the ID as "1" from "0" on the multi-entry panel after completing the registration.



## 8. Chime sound from individual door unit

\* Chime will be heard when receiving a call from an individual door.



## 9. The Change and initialization of the password.

### 1) Initialization for the password

Shut off master unit and turn it on again while holding the “extension call” button and “Door release” button at the same time for 3 seconds.

(Note: Default password: 1234)

### 2) Changing Resident Password(through Multi Entry panel)

- ① Enter “Residence Number” and “” button for 2 seconds and release when LCD stops blinking.
- ② Enter “Current password”. and press “” button for 2 seconds and release when the LCD stops blinking.
- ③ Enter “ New Password” with 4 digits on Multi Entry Panel displaying “NEW PW ”message. Press “” button for 2 seconds and release when the LCD stops blinking.
- ④ Repeat “New password” to confirm it. Press “” button for 2 seconds and release when the LCD stops blinking. It is completion with returning initial mode.

Note) “1234”as a password can't be used to open the door because it's default “password”. You can't open the door with password until you do change default password (1234) into new password.



# 10. Opening the entrance of Multi-entry panel with password

1) Open the entrance with resident password. (The doors do not open by default password "1234". you use this function only after changing default password into new one)

- ① Enter the resident number in Multi Entry Panel.
- ② Press "☰" button.
- ③ Enter the residential PIN number
- ④ Press "☰" button.

The door is opened with the "OPEN" message displaying on the LCD screen.

2) Open the entrance with Building password.

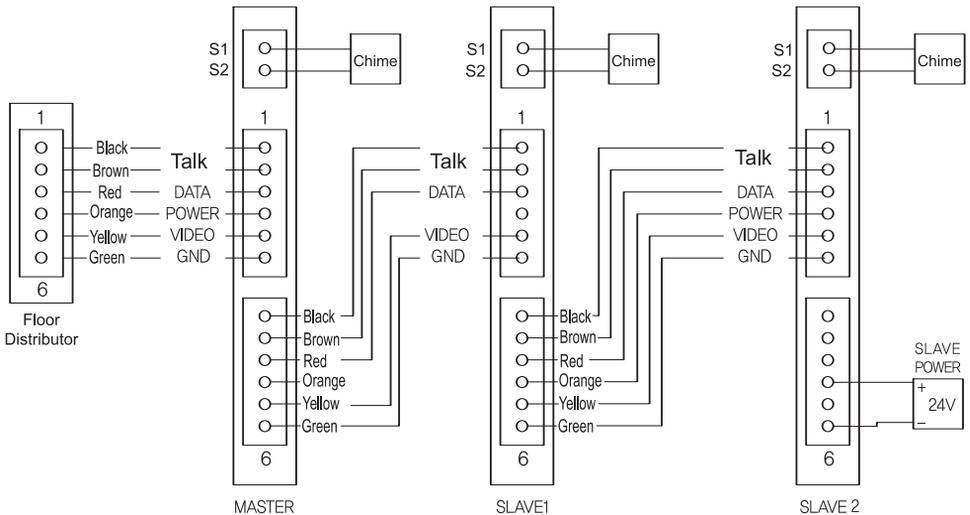
- ① Enter "9900" in Multi Entry panel
- ② Press "☰" button.
- ③ Enter the "Building password"
- ④ Press "☰" button.

The door is opened with the "OPEN" message displaying on the LCD screen.



# 11. Wiring and System diagram

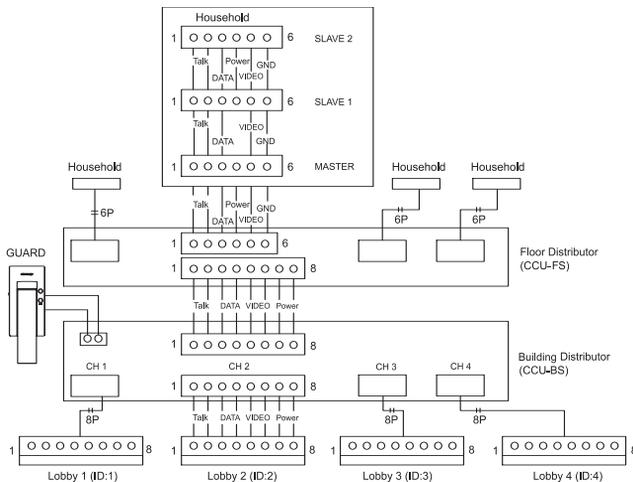
## 1) Wiring Diagram



## 2) Wiring method

- ☞ Please pay attention to the polarity of the wires. Units will not work properly when mis-wired.
- ☞ When using UTP(CAT.5) cable, each cable color should be matched as shown in the wiring diagram.
- ☞ The Power of the Master unit is supplied from the Floor Distributor(a power source is needed per 8 Floor Distributors) without an additional power supply, but additional sub units require a separate power source.
- ☞ Power source ,DC24V/1A cover up to 2 additional sub units.  
(Power line connection between Master unit and Sub units should be separated.)

## 3) System Diagram





## 12. Specifications

| ITEMS                | DESCRIPTIONS  |             |
|----------------------|---|-------------|
| Wiring               | To floor distributor : 6 wires (talk2, Date1, Power1, Video1,Gnd1)                                    |             |
| Power Voltage        | DC24V~28V/ 5A (Power is supplied from Floor Distributor)- an extra power is required for Slave units. |             |
| Communication Method | Hands free  |             |
| Display              | 12.7cm(5")TFT LCD   |             |
| Power                | Stand by : 70mA   |             |
| Consumption          | Maximum operation : 500mA   |             |
| Distance range       | Between Floor Distributor and households  | UTP (Ø 0.5) |
|                      |   | 50m         |



# Memo