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SmartHome & Security

COMMAX

User Manual

Video Door Phone CDV-40NM



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

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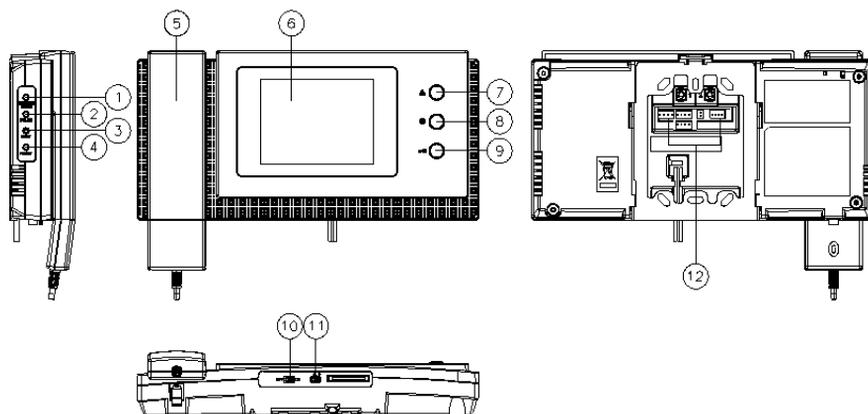
www.commax.com

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.

Parts and Function



	parts	Description
1	MENU/BRIGHT button	Button for MENU Screen when screen is screen saving mode (Screen off) Button for control Screen color/Brightness.
2	COLOR / SELECT button	Set color / Select(Menu) button
3	CONT / UP button	Set Contrast / Cursor UP (Move cursor)
4	RESET / DOWN button	Reset / Cursor DOWN (Move cursor).
5	Handset	Handset
6	Screen	LCD Screen
7	Front Door button / UP button	1. Check Front Door status through door camera. 2. Cursor UP (Move cursor)
8	Interphone Call button	Hold handset and call (Talk) Interphone.
9	Door Open button / DOWN button	1. Turn on electric lock through door camera for door open while talking with door camera. 2. Cursor DOWN (Move cursor).
10	Power Switch	Power ON/OFF Switch
11	Control Volume Switch	Control volume.
12	Port for wiring and programming	Port (Terminal) for connecting Camera/Interphone and updating software

1. Caution

Please, do not turn on/off, insert or remove Micro SD card during saving, capture image or recording video. It might be caused of malfunction, harm or damage goods. (User may lose data in embedded memory and Micro SD card or it may be reason of malfunction)

- When memorized data exceed capacity of memory in external micro SD card, product erase automatically delete oldest data because of limitation of embedded memory capacity. Therefore, we recommend user do back-up data to separate memory.
- Please, check bellow memory spec and use it.
We do not guarantee proper operation and we are not under legal responsibility if user uses other memory which is not recommended by us.

- Recommended spec. of MICRO SD [T-FLASH] Card
(Please, format memory first before use it)

- 1) Manufacturer : SANDISK
MICRO SD : 2GByte
MICRO SDHC [CLASS 4] : 4 ~ 16GByte
- 2) Manufacturer : TRANSCEND
MICRO SD : 2GByte
MICRO SDHC [CLASS 4] : 4 ~ 16GByte

- This product has ' SUPERCAP inside.

' SUPERCAP' is for preventing data lost and damaged in memory if there is temporarily black out or lost electric power. It turns on embedded clock in period time when product lost power.

Recharging ' SUPERCAP' takes over 30minutes after turning on power.

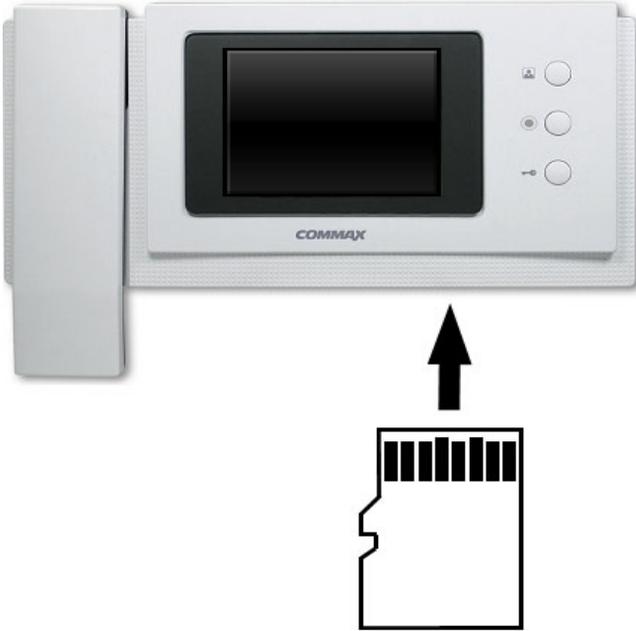
It can operate embedded clock during approximately 24hours without external power.

If data file is many or size of file is big, embedded clock may stop within 24hours. Therefore, user must check and set time in product when turning on product again.

- We recommend check time in product periodically because of time error or difference time.

- How to insert Micro SD [T-FLASH]

Please, refer to bellow photo and pay attention to direction when Insert Micro SD card.
When user inserts Micro SD card, please slide card until you feel a 'click' .



2. How to use product

After turning on power, screen shows booting screen with COMMAX logo and melody.



2-1. Call from door camera station.

(Turning on time of screen is 30±5sec)

- ① When visitor push ' Call' button in door camera station, Video phone sound dingdong and show visitor' s video in monitor screen.
(Screen automatically turns off after 30 sec. if user hold hand set and doesn' t reply call.)
- ② User can set sound volume through volume control switch when dingdong sound is running.

2-2. Talk with visitor through door camera station

(Turning on time of screen with talking is 60±5sec)

- ① When visitor push ' Call' button in door camera station, Video phone sound dingdong and show visitor' s video in monitor screen. User can start talk with visitor after holding handset.
- ② Maximum time of talking with visitor is 60 sec.
- ③ When screen changes to Idle mode (Screen turns off), user can turn on screen again after pushing front door button.
- ④ User can do 3-way communication trough interphone when line is busy between video phone and door camera station. Just hold one interphone handset when you want to talk.
- ⑤ When user holds down handset, talking is over and Video door phone turns to Idle mode.

2-3. Open Door

User can open door through ' Door open ' button while talk with visitor. When press ' Door open ' button, door is opened with sound.

(Door locks which should be interfaced with door camera which has door open function)

※ Interphone also has same function.

2-4. Monitoring through door camera or CCTV

Video phone is on idle status.

- The following is sequentially operated when user push front door button. **(If Video door phone doesn' t set up CCTV in configuration and remove jumper cap for using CAM#2)**
- Camera1 → Camera2 → OFF → Camera1
- The following is sequentially operated when user push front door button. **(If Video door phone sets up CCTV in configuration and remove jumper cap for using CAM#2)**
- Camera1 → Camera2 → CCTV 1 → CCTV2 → OFF → Camera1

CCTV monitoring can' t be activated on talking status.

- The following is sequentially operated when user push front door button
- Camera1 → Camera2 → Camera1 → Camera2

** Screen will be turned off when user holds handset during CCTV monitoring.

2-5. working with connected interphone. [Installed separated interphone which can be interfaced]

1. Talking with door camera phone

- ① When visitor call tenants through door camera, video phone and interphone make ring tone.
- ② User hold handset in interphone or video phone then he/she can make call. Push ' Door open ' button which design like ' key ' can open door.
- ③ User can do 3-way communication through video door phone when line is busy between interphone and door camera station. Just hold one interphone handset when you want to talk.

2. Call between interphone and video door phone.

- ① When user call videophone from interphone, hold interphone handset then press call button. Videophone will make ring tone.

User hold handset in video phone at this time, he/she can make call from interphone to videophone or vice versa. If visitor call through door camera station while tenants have a call with interphone, video phone and inter phone sound ring tone and user can do 3-way communication

between video door phones, inter phone and door camera station.

- ② When user wants to call interphone from video door phone, hold hand set and press interphone button. Ring tone will make sound during press interphone button. User can communicate with receiver after he/she hold handset in interphone.

2-6. Operation of CCTV interfacing

When user activates CCTV in configuration, please make sure CCTV has different function from door camera station. It only supports video monitoring function, video/image capturing, recording and saving captured images. Unless a visitor call CCTV from door camera, LCD screen will be on continuously.

3. Set up configuration

* Set up configuration use bellow 4 buttons.

Start Menu / Move previous page : MENU button

[Menu button is placed on left side of product and it is used when screen is turned down]

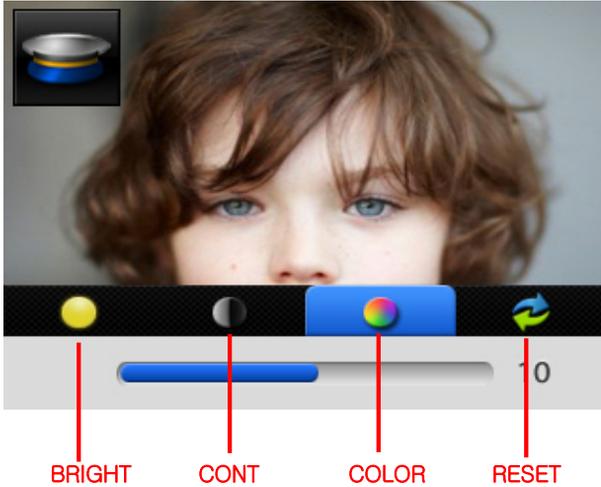
Select / Input : SELECT button (Interphone button which is placed on front side of product)

Up / right : △ UP button (Fron door button)

Down / left : ▽ DOWN button (Open door button)

3-1. Set screen (Brightness/Contrast/Color control)

Configuring Screen



* How to set

1. Press Each function button which you want to set among Brightness, Contrast, and Color during Video Communication / Monitoring status. Each category is selected when setup menu is shown like as picture above.
 - ① Brightness : Set brightness.
 - ② Contrast : Set contrast.
 - ③ Color : Set color.
2. Use Δ/∇ button for setting.
3. After changing value, push SELECT button for confirming set up.

Reset Screen



* How to set

1. Press Reset Button during Video Communication / Monitoring status
2. Use Δ/∇ button and select ' YES' .
3. Push SELECT button for confirming reset.

3-2. Set up configuration

Push Menu button in idle mode then press Δ/∇ button for moving category. Press select button for moving back category..

3-2-1. MEDIA SET (Record and save video and still cut image)



→ Still cut image can be saved up to 128 cuts.

→ When memorized data exceed capacity of memory in external micro SD card, product erase automatically delete oldest data because of limitation of embedded memory capacity.

*** CAPTURE (AUTO) ***

→ When user sets ' auto' in set up configuration, still cut image can be automatically saved. It is only activated during call / talk.

→ Press and hold call/talk button over 1 sec. user can save still cut image again.

*** CAPTURE (MANUAL) ***

→ Press and hold call/talk button over 1 sec. during call / talk user can save still cut image.

*** Video (AUTO) ***

- When user sets ' auto' in set up configuration, video can be automatically saved. It is only activated during call / talk.
- If user doesn't receive call, time of recording video is 30 sec. If user receives call, time of recording video is 60 sec. Video is automatically recorded and saved in auto status.
- Video clip can be saved max. 1minute 30 seconds after calling.
- If call is canceled or terminated during recording video, video is recorded until time of stop
 - If user press and holds ' monitor button' over 1sec, still cut image (captured image) can be saved. However, video clip still be continuously recorded.

***** Video (MANUAL) *****

- Press and hold call/talk button over 1 sec. user can save and record video.
- If user press and holds ' monitor button' over 1sec, video clip can be recorded. However, still cut image (captured image) still be continuously saved.

However, CCTV can only support manual record (without auto record). Therefore, user press and holds ' monitor button' over 1sec, video clip can be recorded for 60 sec.

Please make sure, there is a limitation of memory size. Therefore, CCTV try to keep monitoring for security reason but recording time has 60 sec. limitation.

After 60 sec. of recording, user can activate recording again by pressing ' monitor button' manually.

*** Folder and file management ***

→ Create basic folder

→ CDV-40NM \ VIDEO \ (Video saving folder)

→ CDV-40NM \ PICTURE \ (Still cut image folder)

When the icon is displayed please built in data or backup.



→ The name of saved file and form

Still image	110516_130502_D1.jpg			
	110516_130502_C2.jpg			
Video	110516_130502_D1.mp4			
	110516_130502_L1.mp4			
Explanation of file	Date	Time	Video Type	File Type
	11year 5month 16 date	13hr 5min 2sec	D1,D2 = Lobby 1,2 C1,C2 = CCTV 1,2	Still image → (*.jpg) Video → (*.mp4)
Note	<p>→ It is necessary memory or minimum space of Micro SD Card. Minimum space : Built in Flash - 20MByte, Micro SD - 100MByte</p> <p>→ Stop image Mix 128 cuts If you excess capacity please eliminate old file and then save.</p> <p>→ Video can be saving in full. (If not have any space in the memory)</p> <p>If not have any space in the Micro SD Card. It will be displayed icon in LCD screen. When you displayed icon it will be eliminated old file and then Video save.</p> <p>You can eliminate date to secure minimum space and please save backup Important data.</p> <p>It will be disappeared “ IN FULL ” , “ SD FULL ” icon when you eliminate the format of Micro SD Card or built in memory you can secure minimum space</p> <p>You can save depend on the file qty please check reference. It is depend on the memory size and please see the as follow information. Even though you have extra saving space if excess file it will be canceled automatically old file and save.</p> <p>→ If not have Micro SD Card you can save in the memory of products If you insert Micro SD Card, after data backup you can save in Micro</p>			 

	<p>SD.</p> <p>If you eliminate Micro SD Card, you can re-save in the memory.</p> <p>→ It will be displayed descending order.</p> <p>→ It is possible whole cancel and selection cancel</p>
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→ **The number of saving for capacity**

	Internal Flash	Micro SDHC Card		
Capacity	100 MByte	4 GByte	8 GByte	16 GByte
Stop Image	128 cut	128 cut	128 cut	128 cut
The number of Video saving (60 Second)	max 100 cuts	max 400 cuts	max 1,000 cuts	max 1,000 cuts
Video storage time	80 min	400 min	800 min	1500 min
<p>→ Stop image can make 128 cuts fixed. But it can be changed number of video according the time of image and depend on the space.</p> <p>→ Size of stop image: 80 KByte</p> <p>→ Size of Video file: 10 MByte (60 second)</p>				

Data (video saving and still cut image) saving, play back and eliminate: It can be saved data (video and still cut image) when you eliminate the data or play back you can check the image or eliminate video and still cut image.

Video and still cut image setting: User can set up recording and saving video clip or saving still cut image. User can set up video recording that you want time and save.

You can set up video recoding and saving when you call.

→ IF not MICRO SD Card it will be saved internal memory.

If MICRO SD Card insert in the product, it can back up data and save MICRO SD.

If MICRO SD Card eliminated, it will be saved internal memory.

This function is only when there is memory problem.

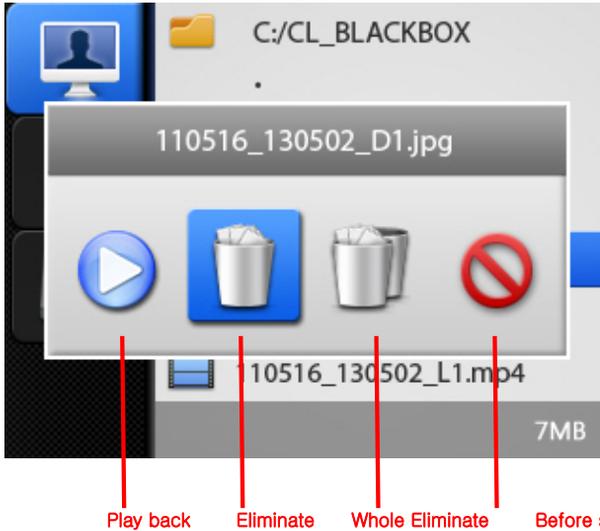
Please format data of video saved and still cut image (If you format you can't return please carefully use the format)

If insert MICRO SD: It can be formatted MICRO SD.

If not insert MICRO SD : It can be formatted internal memory.

4. INFO : It is possible check to actual memory capacity.

(1) Data (video / still cut image) save , play back and eliminate



* A method of setting

- ① It can be moved from the mode of environment (3-2) to disk icon, please press SELECT button and using the button \triangle/∇ you can move the icon.
- ② Please press SELECT button and then select items.
- ③ Please use the button and select data saved.
- ④ When you select, please press SELECT button and play back and eliminate.

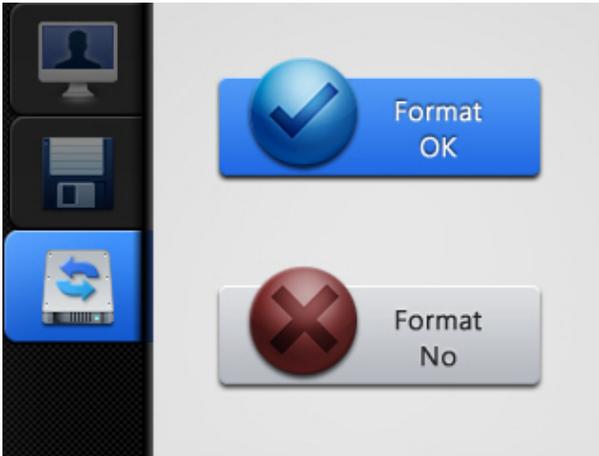
(2) Setting of video and still image



* A method of setting

- ① It can be moved from the mode of environment (3-2) to disk icon, please press SELECT button and use the button Δ/∇ you can move the FORMAT icon.
- ② Please press the SELECT button and then select items.
- ③ Please use the button and select video or still cut image.
- ④ When you select please press the SELECT button and then it will be finished.
- ⑤ Please select auto or manual using the button and please press the SELECT button and It will be finished.

(3) FORMAT (Data format):It can be formatted data that products video saved and image(CAPTURE).
If not read the image saved, it can be making format. (FAT of memory break down)



* A method of setting

- ① It can be moved from the mode of environment (3-2) to disk icon, please press SELECT button and using the button Δ/∇ you can move the FORMAT icon.
- ② Please press the SELECT button and then select items.
- ③ You can use the button Δ/∇ and select for FORMAT setting.
- ④ Please after select you should be pressed SELECT button and then it will be finished.

(4) INFO (Checking for Memory capacity)

It is possible to check actual memory capacity

- (1) IN : Remain capacity /Total capacity –It can be showed internal memory capacity of product.
- (2) MICRO SD : Remain capacity /Total capacity – It can be showed MICRO SD capacity

3-2-2. UTILITY



1. **Time setting:** Set the time of product. (It will be used video and image saved)

CCTV activated : User can be settled until two CCTV.

if not activate you can not connect CCTV.

(1). **Time setting** : Setting the time of the product. (It is used when you save movie or image.)



- How to set up
 - ① In the configuration mode of 3-2, move to UTILITY icon and after press the SELECT(Unlocking button) button, move to Time setting icon with Δ/∇ (Interphone button/Call button).
 - ② Press the SELECT(Unlocking button) button to choose an item.
 - ③ Enter the time of the household phone with Δ/∇ (Interphone button/Call button).
 - ④ After entering, click select(door release) button to complete the time setting

(2) CCTV setting

: Users can set **CCTV on or off** up to 2, if not activating, CCTV can not be connected.



How to set up

- ① In the configuration mode of 3-2, move to UTILITY icon and after press the SELECT(Unlocking button) button, move to CCTV activation icon with Δ/∇ (Interphone button/Call button).
- ② Press the SELECT(Unlocking button) button to choose an item.
- ③ Select CCTV on or off with Δ/∇ (Interphone button/Call button).
- ④ After choosing, complete the set with SELECT button(Unlocking button).

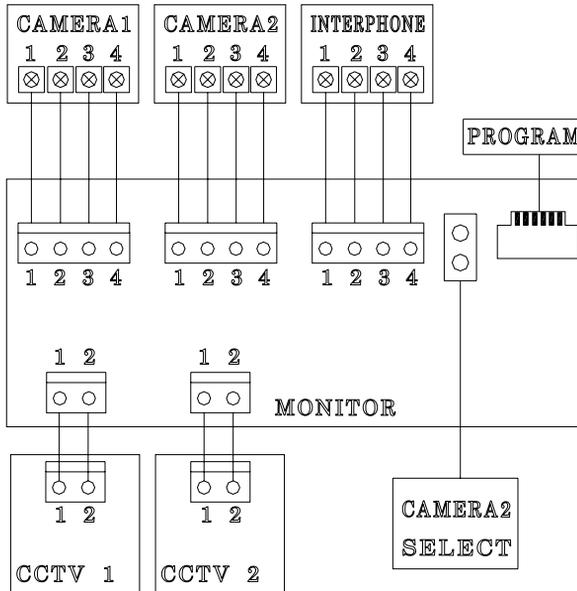
3-2-3. INFORMATION (Model Version and etc..)

- (1) Possible to check the information of the product such as name of product, version, etc
Model : Model name
- (2) Version : The version of the product

5. Wiring

* CAMERA CONNECTOR POLARITY

1. RED : VOICE 2. BLUE : GND 3. YELLOW : POWER(+12V) 4. WHITE : VIDEO



When the system is configuring, there should be connected the Monitor to CCTV, Camera, and Interphone by UTP(Cat.5) having 3-signal Lines and 5-grounds.

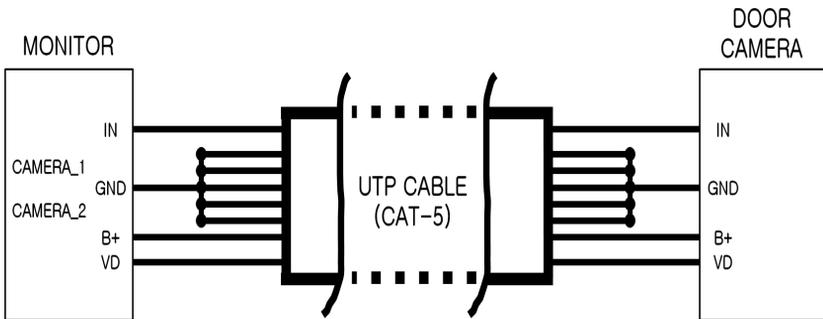
But the Coaxial Cable is recommended to get the noise free video

■ Caution on the Wiring

Be sure to use a separate wiring for each connect

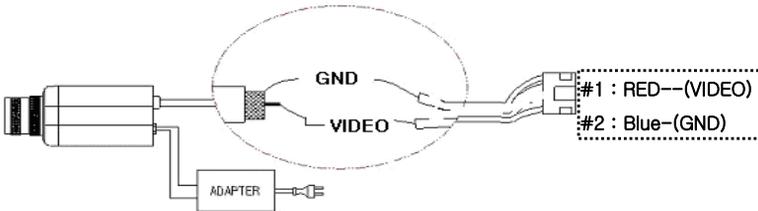
If UTP CABLE[CAT.5] is used for CAMERA No. 1 and CAMERA No.2, 2 UTP CABLE should be used.

If one UTP CABLE[CAT.5] is used for CAMERA No. 1 and CAMERA No.2, you may face video image quality related problem. Therefore, please use separate UTP for each camera.

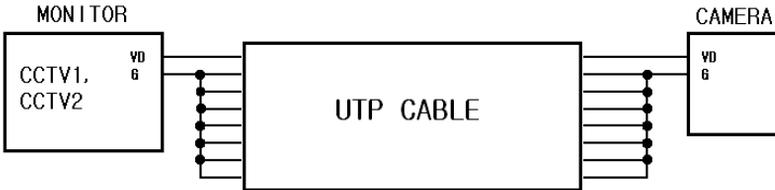


■ CCTV Camera Wiring

- ◆ CCTV CAMERA requires additional power supply .
- ◆ Please choose appropriate Coaxial Cable, depending on the distance.

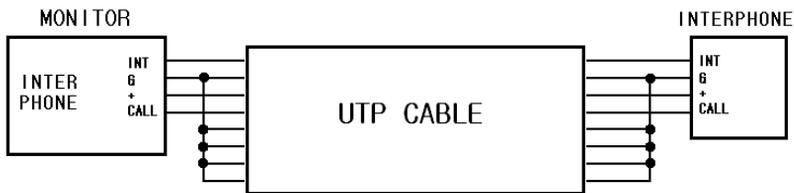


◆ UTP CABLE WIRING



If UTP CABLE[CAT.5] is used, please use 7 lines for GND line. Other wise, you may image quality related problem.

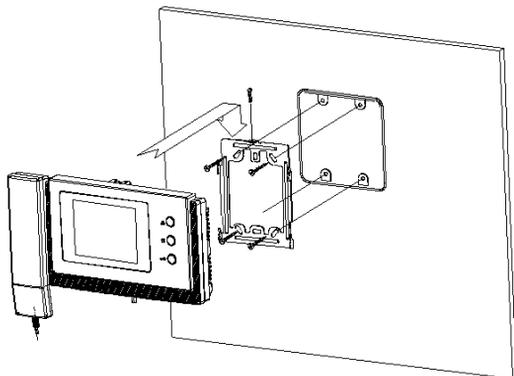
■ INTERPHONE WIRING



If UTP CABLE[CAT.5] is used, use 5 lines for GND line.

INSTALLATION

▷ Monitor Installation



Note

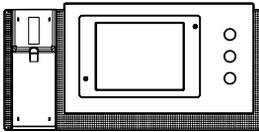
1. Avoid the range of direct sunlight
2. Recommended height is pertinent from 1450 ~ 1500mm
3. Avoid the installation near magnetic activity, humid temperatures and gas

* Wiring caution

1. If the product is installed near high tension cable, please use coaxial cable and metallic pipe.
2. If the sheath of the cable is peeled off and exposure partly, it may cause short circuit resulting in malfunction.
3. Please turn off the monitor and connect the camera.
4. Be careful of wiring as it has polarity.

5. Only 1 camera is available in the default setting of this product. Please remove short pin on the back to use two door cameras.
6. 4 cameras can be connectable for this product. However, if the video signal cables are installed with not enough space to one another, there might be noise on the LCD due to the interference of video signal. Therefore, please maximize the distance between the cables.
7. If UTP CABLE[CAT.5] is used, use 5 lines for GND line to avoid video noise
8. If [CAT.5] is used for CCTV wiring, please use all lines for GND except the cable for video line to avoid video noise.
9. We recommend that NTSC and PAL types are not mixed.
10. Please turn it off and on when you connect the cameras again after the camera is disconnected

Part lists



CDV-40NM



Wall Bracket



User Manual



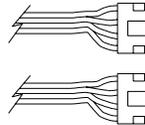
PIN 2P SHUNT



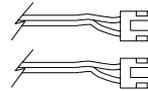
Mounting Screw
4*18 (4EA)



Monitor Fixing Screw
3*6 (1EA)



Connector
4P*300(2EA)



Connector
2P*300(2EA)

Specification

GDV-40NM

Rating Voltage	100V~240V~, 50/60Hz
Power consumption	On stand-by : 4W On talk: 10W
Transmission way	Door camera 4wires (Polarity), interphone 4wires (polarity),
Monitor	10.16cm TFT / Digital LCD
Transmission way	Full duplex (Hands-Free)
Call sound	Door : Electronic chime (Sol Mi Do) - interphone : Beep
Display	60 ± 10sec
Distance	28mm(Φ0.5) / 50mm(Φ0.65) / 70mm(Φ0.8)
Working temperature	0 ~ +40℃ (32° F ~ 104° F)
Dimension	249(W) × 158.5(H) × 47.6(D)