Video Door Phone

User & Installation Manual



HAC-307N

For your protection, Please read these instructions completely and keep it for future reference

HYUNDAI TELECOM Co.,Ltd.

SAFEGUARDS

1. Read Instructions

All the safety and operating instructions should be read before the unit is operated.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Follow instructions

All operating instructions, maintenance and all warnings should be followed.

4. Cleaning

Turn off the power to the unit before cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for the body of unit.

5. Attachments

Do not use attachments not recommended by the unit product manufacturer, as they may be hazardous or cause damage.

6. Heat and Moisture

Do not expose this unit to direct sunlight or rain for reliable operation.

7. Installation

Do not install this unit on an unstable place (hot, cold, humid or excessive dust). Use only with a mounting accessory recommended by the manufacturer or sold with the unit. Follow instructions of the manufacturer and qualified service personnel when installing this unit.

8. Ventilation

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. Never place your unit on a bed, sofa, rug, or similar surface or on or near a radiator or heat register. This unit should not be placed in a built−in installation such as a bookcase or rack unless proper ventilation is provided.

9. Power Sources

This unit should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your appliance dealer of local power company. To operate the unit by battery of another power source, consult the operating instructions.

10. Grounding and Polarization

This unit may be equipped with either a polarized 2−wire DC adaptor line Plug

(a plug having one blade wider than the other) or a 3–wire grounding type plug, a plug having a third(grounding) pin. The 2–wire polarized plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your outlet. Do not defeat the safety purpose of the polarized plug.

11. Overloading

When using this product, do not overload the power outlets of extension cords as this could cause fire or electric shock.

12. Accessories

Do not place this unit on an unstable cart, stand, tripod, bracket, or table. If the unit falls, it could cause injury or damage to the system.

13. Object and Liquids

Never push objects of any kind into this unit through the openings. Never spill liquid of any kind on the unit.

14. Servicing

Do not attempt to service the unit yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

15. Power Line

The system should not be located near power lines or electric lights or power circuits.

16. Damage Requiring Service

Unplug this unit from the wall outlet and refer servicing to a qualified service person if any of the following occur:

a. If the power supply cord or plug is damaged.
b. If any liquid has been spilled into or objects have fallen in the unit.
c. If the unit has been exposed to rain or water.
d. If the unit has been dropped or otherwise damaged.
e. If the equipment exhibits a distinct change in performance

17. Replacement Parts

When replacement parts are required, use replacement parts specified by the manufacturer.

Important Notice

Always use discretion when installing video and audio surveillance equipment especially when there is perceived privacy, or an expectation of privacy. Inquire regarding federal, state and/or local regulations applicable to the lawful installation of video and/or audio recording or surveillance equipment. Party consent may be required.

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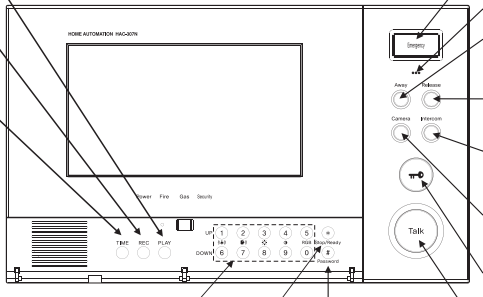
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UNIT & COMPONENTS

UNIT & COMPONENTS

Monitor Front Panel



Play Button
Video Replay or time set(value decreases).

Rec. Button
Video Recording or time set(value increases).

Time Button
It is used when setting the date and time.

Emergency Button
It is used in emergency

Mic

Security Button
It is used in arming or disarming security mode

Release Button
It is used in releasing emergency

Intercom Button
It is used in interphone call and starting conversation

Camera Button
It is used when starting door phone monitoring and conversation

Open Button
Door opens during door phone conversation

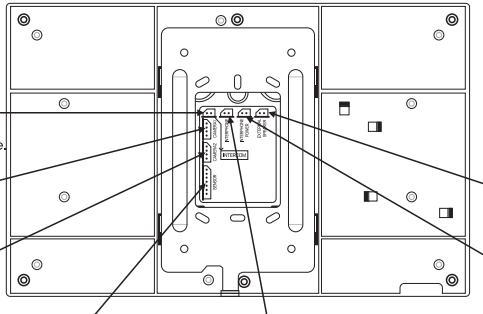
Talk Button
Is used in starting and ending conversation.

Ten Key (Numeric Buttons)

Stop/Ready Button
Hold/Stop of Alarm, Fire, Gas.

Password Button
It is used when changing the password.

Monitor Side & Bottom Panel



Intercom
It is used when connecting Intercom communication line.

Camera1
No.1 door phone camera is connected.

Camera2
No.2 door phone camera is connected.

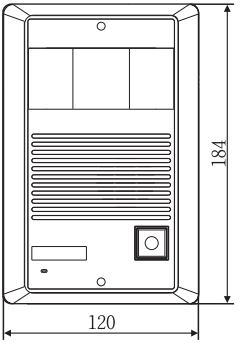
Sensors
Sensor of fire, gas and Buglar prevention is connected.

Interphone
Interphone conversation line is connected

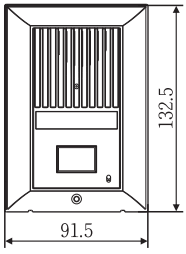
External speaker
It is used in connecting the external speaker

Interphone power
Interphone power cable is connected

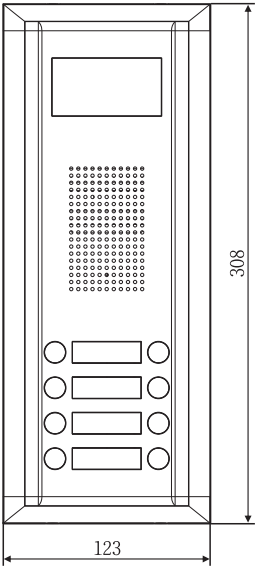
Optional Cameras Front panel



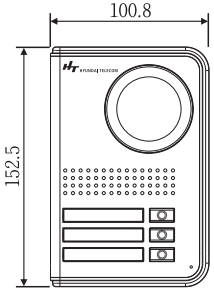
HCB-300/HCC-300



HCB-500/HCC-500



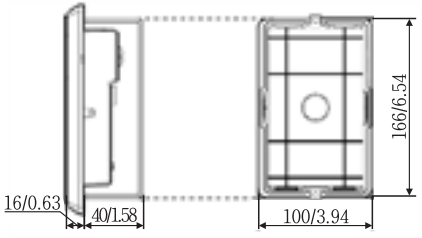
HCB-600E/HCC-600E



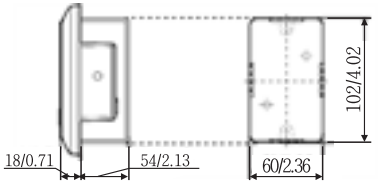
HCB-700/HCC-700

(mm/inches)

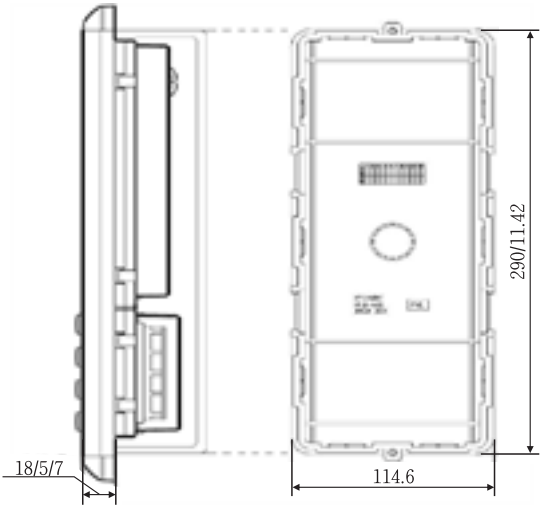
Optional Cameras Side & Bottom panel



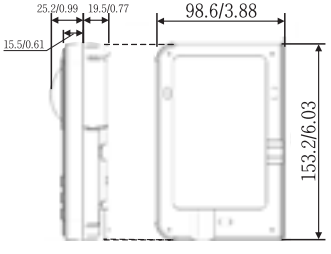
HCB-300/HCC-300



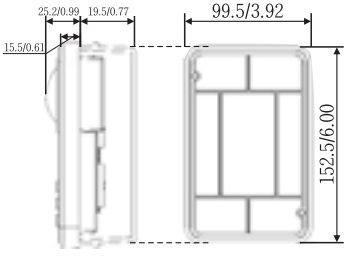
HCB-500/HCC-500



HCB-600E/HCC-600E



HCB-700/HCC-700
(Surface mounted type)



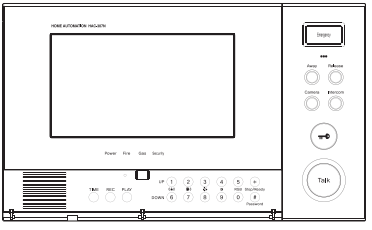
HCB-700/HCC-700
(Flush mounted type)

(mm/inches)

PARTS CHECK-LIST

The parts shown below are provied by the Manufacturer and are enclosed in the box

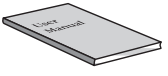
HAC-307N



Monitor



Mounting Bracket



User Manual



Mounting Screws
(4×20mm)



Magnetic Core



Monitor Mounting Screw
(3×8mm)



Main Power Cable 1ea



Cable 7P
(1×280mm)



Cable 4P
(2×280mm)

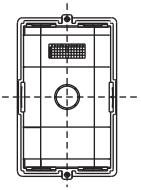


Cable 2P
(4×280mm)

HCB-300/HCC-300



HCB-300/HCC-300



Flush Box



Hexagonal
Wrench

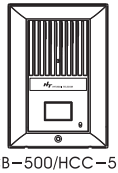


Tamper Proof
Screws(3×30mm)

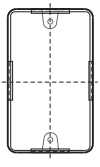


Rubber Screws
Covers

HCB-500/HCC-500



HCB-500/HCC-500





Wall Bracket
Screw(4×30mm)



Tamper Proof
Screws(3×30mm)



Hexagonal
Wrench



Rubber Screws Covers

HCB-600E/HCC-600E



HCB-600E/HCC-600E



Flush Box



Washer



Tamperproof Screw(3×15mm)



Cover Mounting Screw(3×6mm)



Hexagonal Wrench

HCB-700/HCC-700
(Surface mounted type)



HCB-700/HCC-700



Camera Mounting Bracket



Front Aluminum Panel Mounting Screw(3×6mm)



Camera Mounting Bracket Screw (3×10mm)



Wall Mounting Screw (4×30mm)

HCB-700/HCC-700
(Flush mounted type)



HCB-700/HCC-700



Flush Box



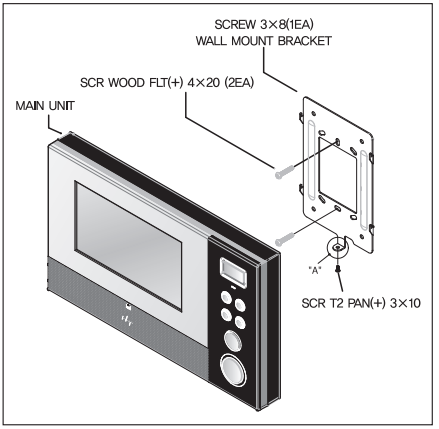
Front Aluminum Panel Mounting Screw(3×6mm)



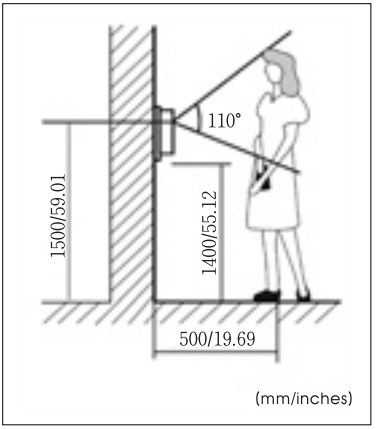
Flush Box Mounting Screw (3×10mm)

INSTALLATION

Installation



<Monitor>



<Camera>

1. After determining the mounting locations for both the outside camera and inside monitor, it is recommended to mount the camera and monitor to the height of an average adult's eye level from the ground(Approx. 1500mm/59 inches)
2. At the selected monitors mounting location, attach the mounting bracket firmly to the wall.
   Drill a hole in the center area of the bracket just large enough for the electrical wiring to pull through the hole. Connect the electrical wires from the camera unit to the monitor–screw terminal.
3. Connect the handset cord to the monitor unit.
4. Attach the wired monitor unit to the wall mounting bracket by setting the monitor over the four bracket hook and slide it down, insert the tiny machine screw into the hole in the tab at the top of the bracket to hold the monitor in place.
5. Plug the AC power cord into a standard household outlet.
6. Place the power "On/Off" switch in the "On" position.
7. The socket–outlet shall be installed near the equipment and shall be easily accessible.
8. Connect the cable through the magnetic core provided in the giftbox.

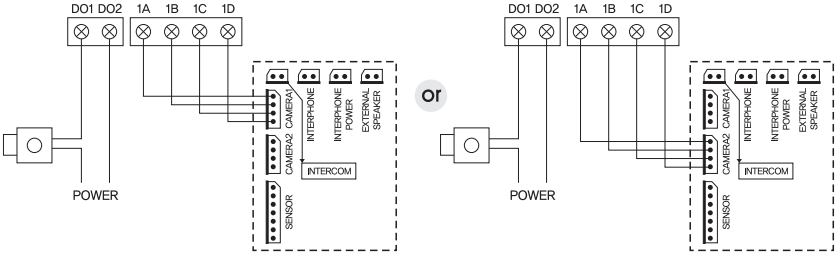
Important Mounting Notes:

Do not install the monitor and camera units where they will be exposed to dirt, direct sunlight(or other strong light), direct moisture, high temperature(over 40℃) or high humidity conditions. Do not select an installation location subjected to vibration or pounding.

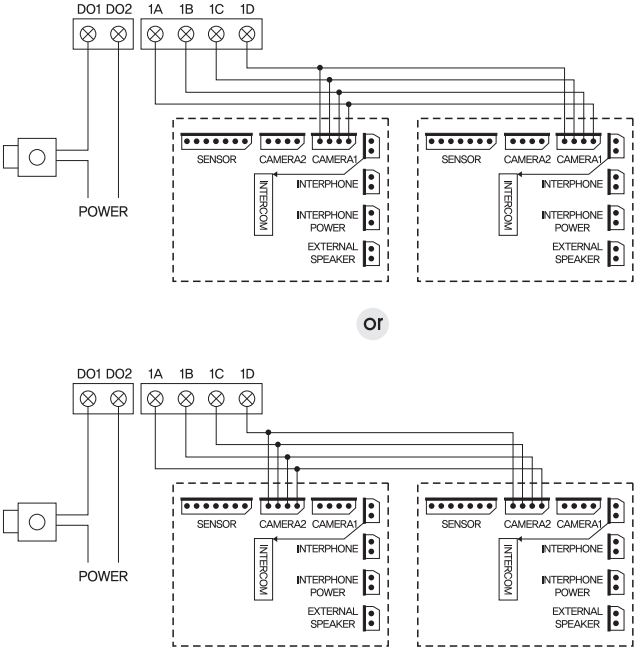
Select a mounting location close to an AC outlet where it is easy to view the LCD screen and operate the monitor.

WIRING DIAGRAM

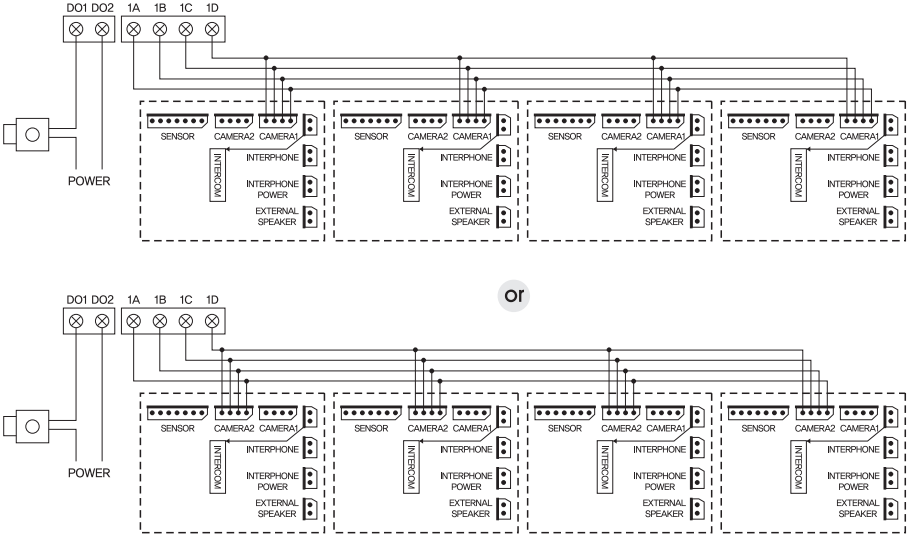
■ 1 Camera(HCB-701/HCC-701) & 1 Monitor



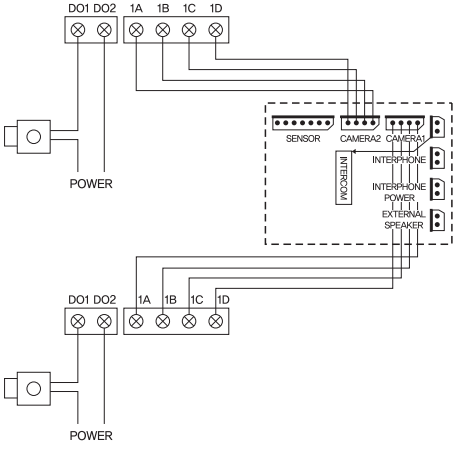
■ 1 Camera(HCB-701/HCC-701) & 2 Monitor



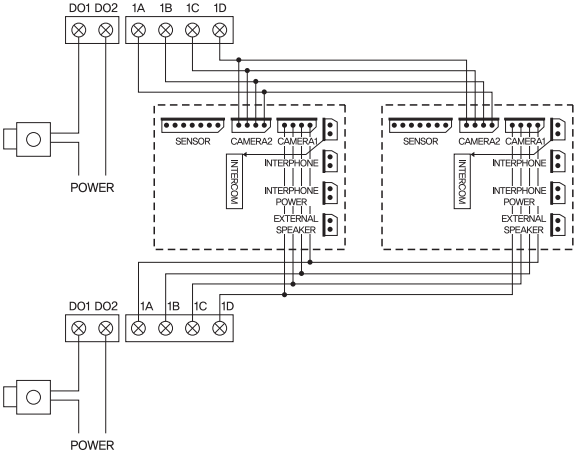
■ 1 Camera(HCB-701/HCC-701) & 4 Monitor



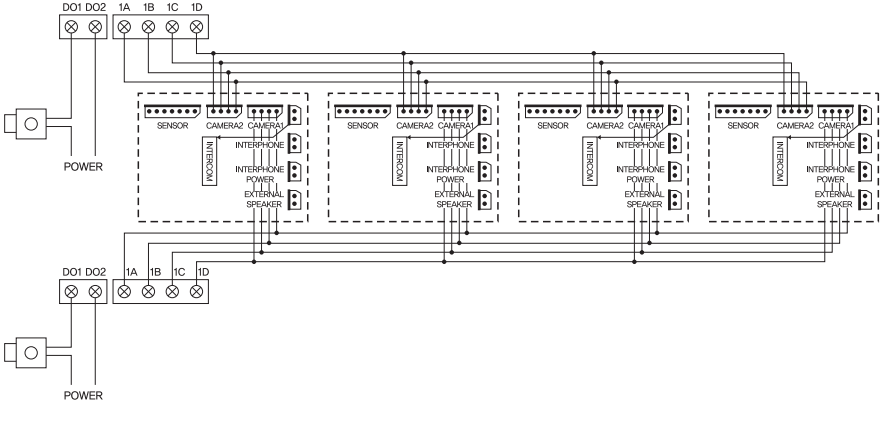
■ 2 Camera(HCB-701/HCC-701) & 1 Monitor



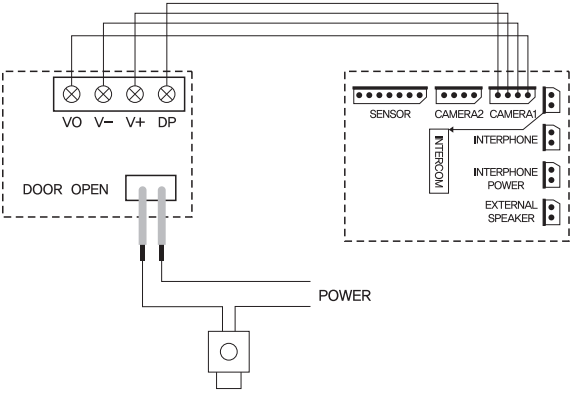
■ 2 Camera(HCB-701/HCC-701) & 2 Monitor



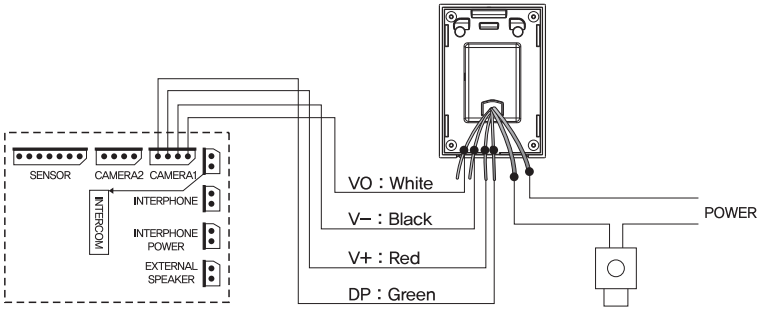
■ 2 Camera(HCB-701/HCC-701) & 4 Monitor



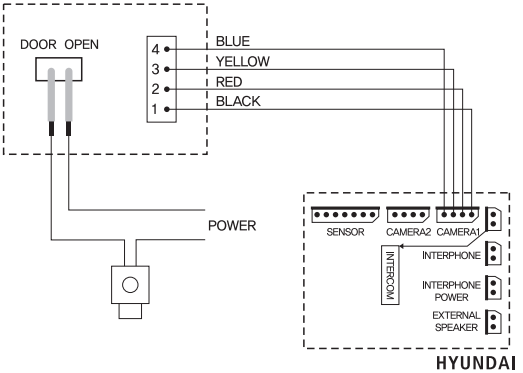
■ 1 Optional Camera(HCB-300/HCC-300) & 1 Monitor



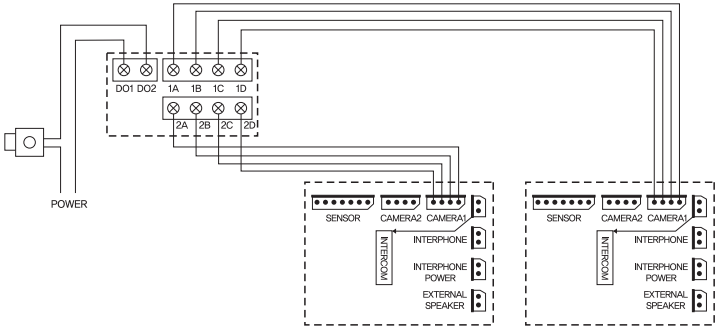
■ 1 Optional Camera(HCB-500/HCC-500) & 1 Monitor



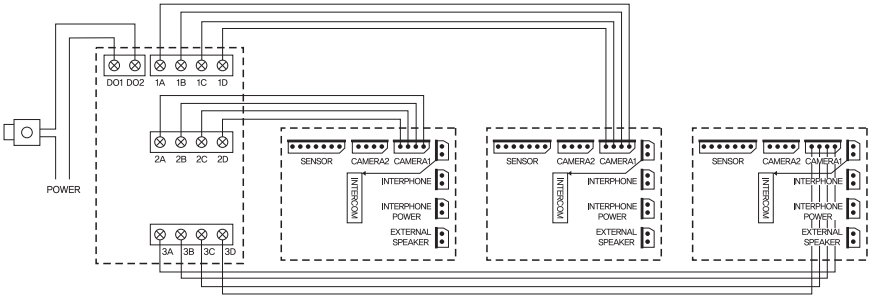
■ 1 Optional Camera(HCB-600E/HCC-600E) & 1 Monitor



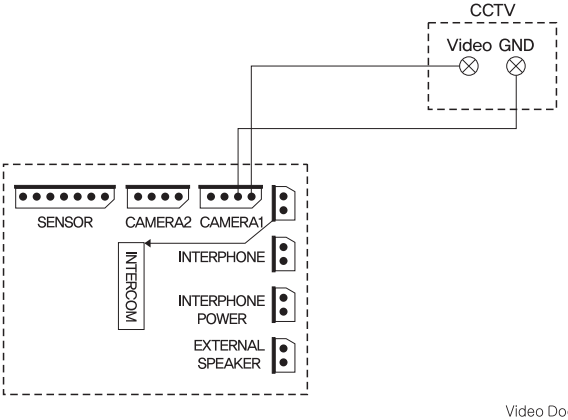
■ 1 Optional Camera(HCB-702/HCC-702) & 2 Monitor



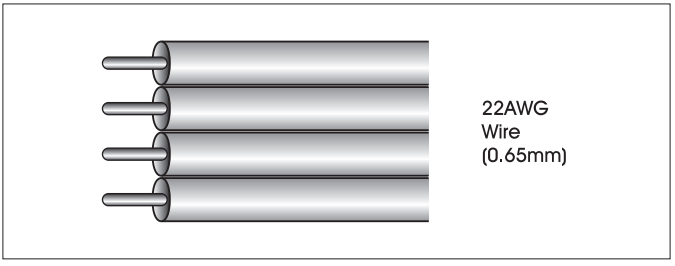
■ 1 Optional Camera(HCB-703/HCC-703) & 3 Monitor



■ 1 Optional CCTV Camera & 1 Monitor

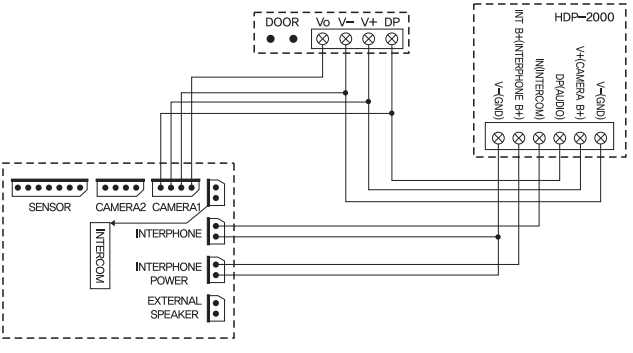


Wiring is not supplied with your Video Doorphone System. Use AWG #22 wire(0.65mm) / TIV wire(0.80mm) and follow the appropriate wiring diagrams exactly for optimum system performance and safety.

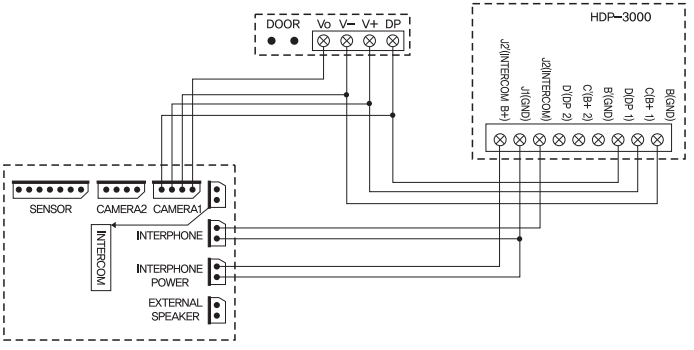


When planning the initial HAC-307 System wiring Installation, consider future system expansion. The total wire length for a single camera and monitor system (or any combination of additional cameras or monitors) must not exceed 50m/165feet total wiring for optimum performance.

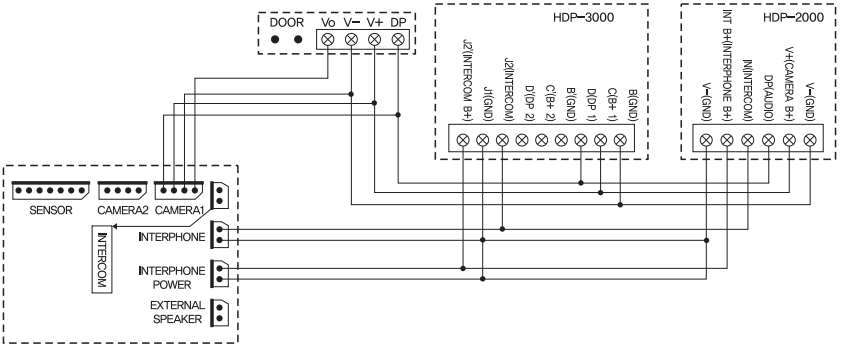
■ 1 Optional Interphone(HDP-2000)



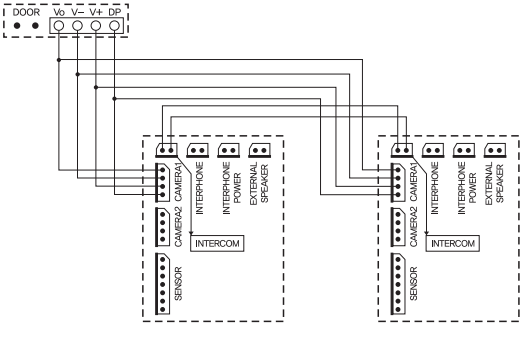
■ 1 Optional Interphone(HDP-3000)



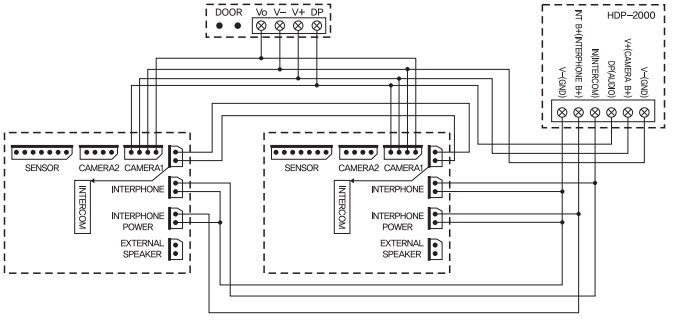
■ 1 Optional Interphone(HDP-2000) & 1 Optional Interphone(HDP-3000)



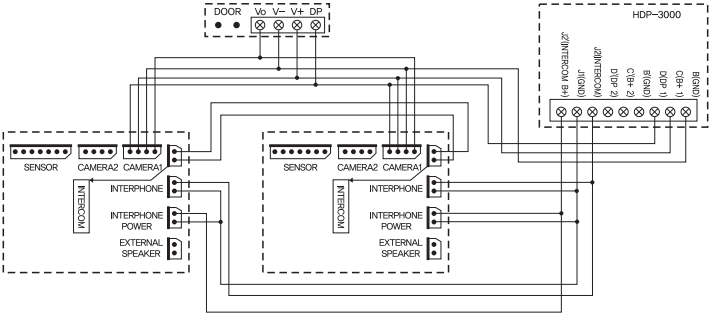
■ 1 Optional Intercom(1 Monitor + 1 Monitor)



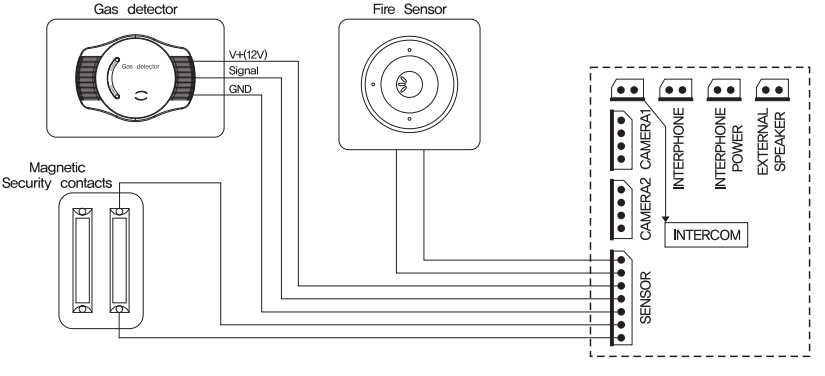
■ 1 Optional Intercom & 1 Optional Interphone(HDP-2000)



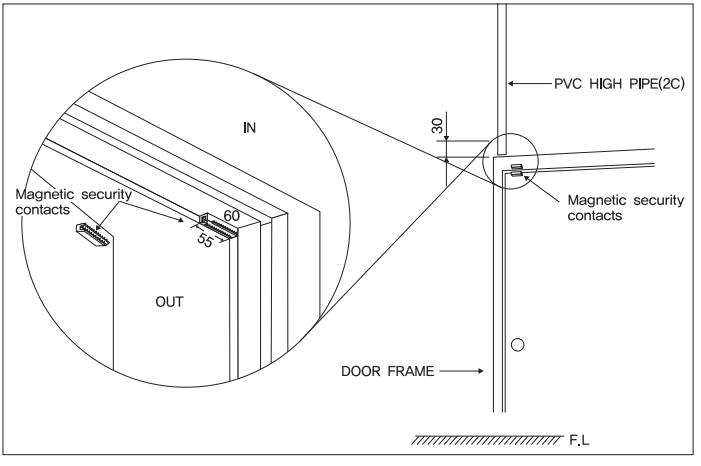
■ 1 Optional Intercom & 1 Optional Interphone(HDP-3000)



■ Optional Sensor Connection & 1 Monitor



(1) Installation of magnetic switches (Magnetic security contacts).

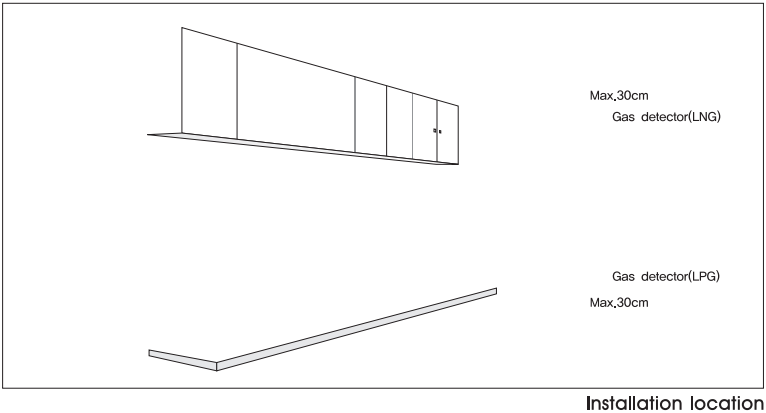


Installation location

Caution (During Installation)

- Do not add impact on the detector. (It may cause reduction of the lifespan since the argon gas for protecting the lead switch leaks)
- Spacer is used on the magnetic part when installing the steel structure. (Prevention of the loss of magnetic force)
- Be sure to connect wiring by using COM, N.O and N.C since it cannot be detected if is wired by using COM and N.C only.
- Tape the wire so that it may be pulled out considering the after service when it is buried.
- Do not bend the lead wire of the detector forcibly when burying it.
- Check the detector whether id functions by opening and closing the door after installation.
- Make the leas wire long when connecting the wire with the line.

(2) Installation of gas detector

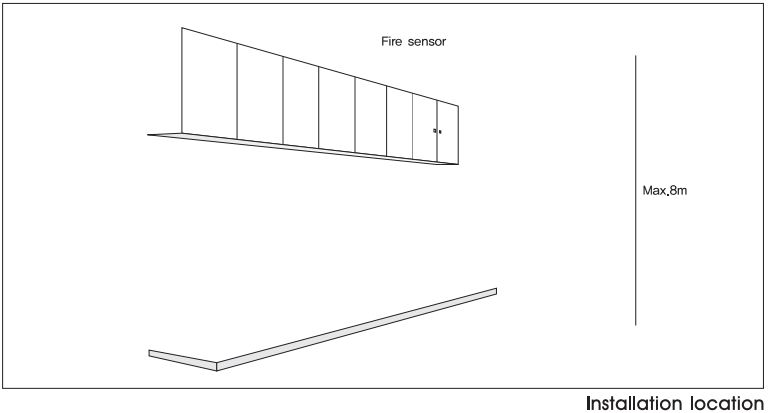


Installation location

Caution (During Installation)

- Avoid the place where vapor may occur or the place where ventilation is good (with ventilating fan or electric fan).
- Use of the place receiving the influence of leakage of water, corrosive gas and etc. is prohibited.
- Select the corresponding detector after grasping the classification of the gas (LNG, LPG) to be detected correctly.
- Confirm the function whether the buzzing sound emits at the same time of flickering of the alarm LED by injecting the gas (using the gas lighter) on the detection inlet.
- Ask the gas supply company at the time of installation since the city gas may use LPG mixed with air instead of LNG according to the area.

(3) Installation of fire sensor



Installation location

Matters to pay attention

- Install the sensor in the place where fire can be detected effectively.
- Make sure that the height of installation may not exceed 8m from the floor.
- Install in the sensor place apart more than 1.5m from the air outlet.
- Install the fire sensor so that the bottom of the heat detector may be located within 30cm from the level of attachment.
- If the depth of beam is deeper than 40 ㎝, make the area as another area for detection.
- Install the sensor so that it may not have the inclination bigger than 45° .
- Install the sensor in the place possible to detect the fire effectively

Caution

It is recommended to use magnetic switches and various kinds of sensors approved by Hyundai Telecom. The performance cannot be guaranteed if the product not approved is used.

OPERATIONS

1. Prior to using the function of conversation

(1) Volume adjustment

It is the function of adjusting the volume of telephone, security office, door phone and the volume of calling.

Volume adjustment of conversation.
Adjust the volume of conversation properly by using the buttons of "②/⑦" during conversation.

Volume adjustment of call.
Adjust the volume of call properly by using the buttons of "①/⑥" when the calling melody sounds after pressing the talk button.

(2) Screen adjustment

Adjust the brightness by using the buttons of "③/⑧", the contrast by using "④/⑨", and the color by using "⑤/⓪" in the state that the door phone screen is indicated.

※ It is impossible to adjust the screen while the recorded video is displayed. (When the VMM is mounted)

2. Intercom conversation

(1) When called

- Intercom lamp flickers and calling sound generates while the other party is pressing the button. (30 seconds)
- If the Intercom button or "Talk" button is pressed, the Intercom lamp and conversation lamp are lighted on and enables to have conversation.

(2) When calling or ending the Intercom conversation

- If the "Intercom" button is pressed, the lamp of security office and the conversation lamp are lighted on, the calling sound generates, and it becomes the state possible to have Intercom conversation.
- If the other party receives the call, the conversation will start.
- If the "Talk" button is pressed or after 3 minutes, the conversation ends.

3. Door phone conversation

(1) When called

- LCD screen is lighted on, the "Camera" lamp flickers and the bell of the door phone rings.
- If the "Camera" button or "Talk" button is pressed, the "Talk" lamp is lighted on and the conversation is started.
- If the "Camera" button or the "Talk" button is pressed during conversation, or 3 minutes passes without pressing any button, the LCD display is turned off and the conversation is ended.

(2) When monitoring the door phone or ending the conversation

- If the "Camera" button is pressed, the LCD is turned on, and now you can monitor camer' s picture.(30 seconds)
- If the "Camera" button is pressed repeatedly while monitoring, the image is converted when more than 2 cameras are installed, and the display is turned and the monitoring is ended if there are no cameras to switch over.
- It is possible to have conversation if the "Talk" button is pressed while monitoring.

(3) Function of opening of the front door

- If the Door Open button is pressed during the conversation, the front door is opened and the conversation ends.

4. Function of security

(1) Prior to using the function of security

- Buglar Detector can be connected with the equipment and generate the alarm. – Password is necessary for setting up or releasing the security mode for leave and releasing the alarm for crime and emergency. (Default value of the password is "0000")

(2) Kind of alarm

Lamp / Category	Lamp	Alarm sound	Monitoring mode	Place to notice
Emergency alarm	Emergency lamp	Siren	24 hours	Indoors, door phone
Buglar alarm	Buglar prevention lamp	Siren	Away/stay at home	

※ Term

- Delay time for Arming : It is the interval from the time of arming the away mode to the time of your going out.(3 minutes)
- Delay time for Disarming : It is the time interval allowed to disarm the away mode when returning to home.(1 minutes)

(3) Function of Away mode

It is the function of monitoring the trespassing from outside by setting up the away security mode, and it monitors the security zone area in the Away security mode.

Setting up the leave security mode

- If all the doors of security zone and monitoring area are closed and the "Away" button is pressed in the state of standby, the Away button lamp flickers and it becomes the state of standby for password input.
- If the password of 4 digits is inputted, the sound of success emits, the "Away" lamp and the "Security" lamp are lighted on, and the sound acknowledging the delay time for security generates.
- Password must be inputted within 5 seconds. If the inputted password is incorrect, the sound of failure generates and the Away mode is ended.
- The "Security" lamp flickers but the alarm does not operate if the abnormal state is detected during the delay time for security (3 minutes).

If the door opens in the state of security during a leave

- If the door is open after the delay time for security, the sound acknowledging the state of the delay time for password input is generated in the speaker and the door phone during the time for notification. Disarm the Away mode.
- The alarm is generated after the delay time for notification (1 minutes) is over.

Release of the security for leave

- If the "Away" button is pressed, it becomes the state of standby for input of password.
- If the password is inputted, the sound of success is generated and the Away mode is released.
- Password must be inputted within 5 seconds. The sound of failure is generated and it returns to the previous state if the inputted password is not correct.

In case any detector is not connected with the monitor.

- Push and hold the button "Away" for 2 seconds to activate the away mode.
- Password is not necessary to activate and stop the away mode.
- Arming delay time and disarming delay time is not activated.
- Security zones do not work.

(4) Function of alarm

Function of alarm during the mode of security

– If the door is open during the mode of security, the "Security" lamp of the opened area flickers together with the "beep" sound at the delay time for notification – If the delay time for notification is over, the alarm is generated. Release the security mode rapidly in order to stop the alarm the alarm.

Function of emergency alarm

– If the "Emergency" button of the equipment for over 2 seconds, the alarm generates.

– If the buttons of "Emergency" or "Release" are pressed again, it becomes the state of standby for input of password. The alarm is released if the password is inputted. – The password must be inputted within 5 seconds. If the inputted password is not correct, the sound of failure emits and it returns to the previous state.

Function of Fire and Gas Detection

– It raises alarm whenever it detects gas leakage or fire smoke.

– Alarm stops when STOP/READY button is pressed. Alarm mode goes back to standby mode when STOP/READY button is pressed again.

– Detection Device in use needs to be checked regularly.

– Fire, Gas Detector approved by Hyundai Telecom are recommended

(5) Setting up the operation of equipment

Password change

– If the "Password" is pressed in the state of standby, the emergency lamp flickers.

– If the existing password is pressed, the sound of success is generated and it becomes the state of standby for input of new password.

– If the intended numerical figure of 4 digits is inputted in the state of standby for input by using the numerical buttons (0~9), the new password is registered.

– If the number is not inputted for over 5 seconds or the menu button is pressed while inputting the number, the sound of failure is generated and the password change mode is ended without any change.

Initialization of the system

–Turn the power off and then turn on while the "Password" button is pressed.

– If the "Password" button is pressed continuously, the melody and setups are initialized and all the lamps are torn on and off.

– The password after initialization is "0000" .

(6) Image recording equipment (VMM)

It is the function of recording the image indicated on the LCD display. It is possible to record images s up to 60 displays and the recorded data disappear if the power supply is failed.

※ If it is recorded more than 60 images (PAGE 00↑ PAGE 01↑…. ↑ PAGE 60), it starts to record from PAGE 00 again.

Setting up the date and time

- Enter the date and time setting mode with "Clock" button.
- Move the item by using the "Clock" button in the state above and adjust the value by using the buttons of "Rec" (Up) and "Play" (Down).
- The items move in the order of month↑ day↑ year↑ day of the week↑ hour– >minute and the mode will end with the display off if it moves to the end.

※ When the time is being set, the image is not shown.

Manual recording.

- If the "Rec" button is pressed while the image is displayed on the screen, the current image is saved.

Automatic recording.

- If the call is received from the door phone during your absence, the image is automatically recorded.

※ It will be recorded only when there is a call from the door phone, if the call is received within 30 seconds right after recording once, it cannot be recorded.

Replay

- The recorded image is replayed if the "Play" button is pressed in case the recorded image exists.
- The image is replayed from the one recorded finally, and the one previously recorded is displayed if the "Play" button is pressed during the reproduction.
- If the "Play" button is pressed after the final image is replayed, the screen is turned off and the operation is ended.
- You may end if you press the "Rec" button during the reproduction if you wish to end in the mid course.

※ Reproduction and setup of the image recording equipment (VMM) functions independently regardless of the unit for each household. Therefore, please refrain from using during the call of door phone, conversation and operation of monitoring.

TROUBLE SHOOTING

If a problem persists after trying the remedies suggested below, contact your local dealer or our technical support or sales department

Unit totally dead(Power Lamp OFF)

- The power cord in not properly inserted in the AC outlet, or the power is not supplied.
- Check that the power ON/OFF switch is in the ON position.

Poor picture appears on the screen

- Make sure that the lens of outdoor camera is clean (Remove the transparent tape attached on the outdoor camera after installation)
- After rain or when outside temperatures are very low, the camera lens may temporarily fog over and cause a blurry image. but this is not malfunction and normal operation will be restored when the moisture evaporates.
- The camera lens may be affected if it is in very bright direct sunlight from the sun or artificial street or house light. When installing, if possible, choose a site that is partially sheltered from direct light.

Can call and communicate, however, there is no audio signal

- Make sure the wiring between the monitor station and the camera station is connected properly.

When the leave cannot be set.

- Check the state of the detector.
- Check whether the external door is closed.

When the image recording cannot be done.

- Check whether the VMM is mounted.(It is impossible to record the image if the VMM is not mounted.)

SPECIFICATIONS

1. HAC−307N

Category		Specification
Power		100 ~ 240VAC, 50/60㎐
Power consumption		Max 25W
Dimension of display (monitor)	LCD	7" TFT LCD, Color
	Image input	1Vp−p/75Ω, Composite PAL/NTSC
	Resolution	1,440W ×234H Dots
	View angle	Up 40°, Down 65°, Left 65°, Right 65°
Maximum Wiring Distance		50m/165 feet (22AWG/0.65mm, 20AWG/0.8mm)
Audio Communication		Duplex Hands−Free
Environment of use	Temperature	0℃~+40℃
	Humidity	Lower than 90% (Relative humidity)
Size	Dimension	305W ×234H × 34D (㎜)
	Weight	Approx. 2.0㎏
Installation		Surface Mount Type

2. Optional Camera(HCC−300N)

Category		Specification
Power		DC 14V (Power is supplied from the monitor)
Power consumption		Max 200mA
Display output		1Vp−p/75Ω, Composite PAL/NTSC
Luminance		0.1Lux
Environment of use	Temperature	−10℃ ~ +40℃
	Humidity	Lower than 90% (Relative humidity)
Size	Dimension	120W × 184H × 16D (㎜)
	Weight	Approx. 0.5㎏
Installation		Flush Mount Type

* The depth of camera on the table indicates the distance from the wall surface after installation

Warranty Conditions

HYUNDAI TELECOM Products are supplied with one(1) year return to base warranty from the date of purchase. We will repair or replace the defective item with a new or factory rebuilt replacement.

Condition

1. This warranty applies to the original purchaser only.
2. All warranty will be invalid if unauthorized repair or modification are made to the unit or in any case of accident, misuse, damage caused by improper installation and altered serial numbers.
3. The liability of HYUNDAI TELECOM is limited to the cost of repair/replacement of the unit under warranty.
4. If you need a warranty service, you should send the product to our customer service Dep't or dealer office. The product in all cases must be accompanied by the following items:
   Your name, address, telephone number, the serial number, copy of your sales receipt showing the purchase date.

The Model Number is on the box and front of the manual. The Serial Number is on the bottom of the unit. Record the Model and Serial Numbers in the spaces provided below. Refer to these numbers for warranty service.

Model No. _____ ***Serial No.*** _____



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