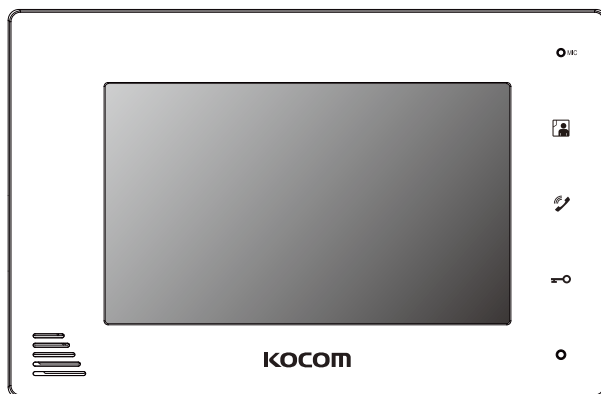


KCV-D372(D1) MANUAL

[7" Digital Color LCD Videophone]

2 WIRE COLOR Handsfree Videophone



- 7" Digital LCD Screen (NTSC/PAL)
- LCD OSD Menu
- Room to Door Communication and Monitoring
- Ultra Low Power Consumption
- Surface Mount Installation
- Door Opener Connectable from Either Monitor or Camera(DC)
- Connection up to 1 Door Camera and 2 Monitors

※ Caution

KCV-D372(D1) MONITOR IS ONLY COMPATIBLE WITH OUTDOOR CAMERA KC-MC11(D1)/MC32(D1)

Cautions for safety

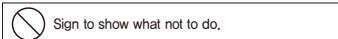
For safe use, please stick to the following cautions.

- Please do not dispose this manual after reading the instructions carefully.
- Please read all instructions to set up rightly.
- This Cautions for Safety may include items that are not contained in specifications of the product that consumer purchases.

The important marks in the manual.

To help our customers to understand this manual, to prevent any personal injury or property damage, some marks are used in the manual. The marks and the drawing signs are below. Please, understand the marks before reading the manual.

The meaning of the drawing signs.



Sign to show what not to do.



Mishandling the device with ignoring this sign may result in serious injury or death.



Mishandling the device with ignoring this sign may result physical injury or material damage.



Sign to tell you that you should follow the instructions.



Sign to tell you that you must unplug the unit.





Sign to tell you that you can't disassemble this unit.



Caution

⦿ Cautions for set-up

- The law limits distributing the power wire to an authorized person from government. The work from an unauthorized person cause fire or electric shock.
 - Place this unit securely on a stable surface. Serious damage and/or injury may result if the unit falls.
 - Do not set up this unit near the leaking place because it may expose you to dangerous voltages or other risks.
 - Even if your product is water proof, do not install it slanted place of water leakage, which can a short circuit.
 - Fix the product on the wall safely according to the installation guideline to prevent any damage or injury.
 - The disconnect device shall remain readily operable.
-
- The work of distributing wires needs skills and experiences. So please, for assistance, contact your dealer or call service center.
 - The communication wire should be built in being distant from the power source. This may result in the risk of fire, electric shock and communication disorder.
- 
- Setting the communication wire in a high humid place such as outside without any protection from rain causes the communication disorder.
 - Keep the hook at the wall-mounted device safe. The hook may cause the physical injury.
 - Think about the thickness and quality of wall material. The unqualified material may make the device fall.
-
- 
- Set the device of the wall-mounted type not to fall. Falling from an earthquake causes personal injury.

⦿ Cautions for Repairs and Maintenance



- Keep the inside of the device clean. Having the dust inside without any cleaning for a long time causes the fire. If necessary, contact your dealer or service center to get cleaning service.



- Unplug this device when you want to check the inside. If there is no plug, please, turn off the circuit breaker.
- If the electric line is connected inside of the unit, please contact your dealer or service center.





- Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.



Warning

⦿ Warnings for Usage

- Do not install this unit near the water and dust, for example, in a bathroom or near the washing machine. It caused fire and electric shock.
 - Do not install this unit near the fire, for example, near kitchen sink, heater or the like.
 - Do not install near the noxious gas such as Hydrogen Sulfide, metal power and the like.
 - Do not install near the water and chemicals.
 - Do not give any damage, break and modify the plug. Overloading, heating, pulling causes the damage.
- 
- Do not place the plug near the heater. The damaged code causes fire and electric shock. Do not pull the power code when unplugging.
 - The damaged code causes fire and electric shock. Must pull with plug. Do not touch with wet hands. It causes the electric shock.
 - Do not use any other voltage, except the marked regular voltage.
 - Do not use the power terminal at the units to other electric device except the designed device.
 - Do not install the units at the leaking place if it doesn't have any waterproof mark. Do not install the unit when the power is on.
 - Install the circuit breaker after checking the safety such as electric shock and leakage. Turn off the power before you install or A/S
-
- 
- Check the suitability of the wire for installing when you use the exiting wire.
 - Do the wiring work by using the designed material.
 - Connect the electric wire with the designed ways and ground.
 - Do not connect with any other devices except the designed devices to compose the system.

ⓘ Cautions for Use

- This unit is not designed for security purpose.
- Do not handle the unit with the wet hands.
- Do not place a pot with water or a small metal material on the Units.
- Do not cover the ventilating opening or put any metal material in the units.
- During thunderstorms, avoid using this unit. There may be a remote risk of an electric shock from lightning.
- Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.



- Do not disassemble the back and cabinet cover.

ⓘ Cautions for Abnormality

- Change the damaged electric code.
- Unplug this unit from plug socket and refer servicing to an authorized service center when the following conditions occur:
- If liquid has been spilled into the unit.
- If the unit does not work normally by following the operating instructions.
- If the unit exhibits a distinct change in performance.
- If the unit has been dropped or physically damaged.



Caution

ⓘ Safety Instructions, Warnings and Cautions of Each System

- Do not disassemble this unit at will as this device is composed by precision parts.
- Install the unit by following the set-up instructions of Kocom.
- Do not touch or insert any foreign substances, for example, sticker, magnetic, opener and the like.
- Make U-type at the end of wires as the rain can effect on the system by following the wires during the rainy season.

ⓘ Videophone

- Separate the AC/DC wire with the hook of the wall-mounted type when installing.
- Connect the wire after peeling the wires properly.
- Do not distribute signal line with AC line.
- Use the designed driver to connect the wire to terminal.
- Do not clean the LCD with the damp cloth for cleaning. Use the only dry and soft cloth.
- Do not install the main gate monitor at the leaking place.

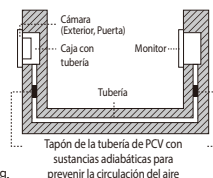
ⓘ Things You Need to Know

- This product is designed as a home videophone and cannot use continuously like monitor camera.
- If there is temperature difference between inner part of camera and surrounding, dew condensation occurs on camera lens and may disturb image. If dew condensation is removed from camera lens, image quality recovers.
- White LED light examination range is narrower than camera shot range at night, so there is less amount of light at night than day. So it is difficult to see the face in low illumination condition due to noise increase on screen, but it is not from defect.
- Monitor screen (liquid crystal panel) is not in defect when some pixels always light or black out.
- Please install monitor and camera over 5cm away.
- Also, avoid installing at a place with too much noise, because too much noise around camera causes phone call inferiority.
- Do not place an object within 20cm in front of monitor. It causes phone call inferiority, especially because microphone is installed at the top of monitor.
- If strong light such as sunlight flows into camera module, screen saturation (or strange mark) and image shaking might occur.
- This is not a defect, so please do not install camera where a direct ray of light do not flow if possible.

ⓘ Cautions

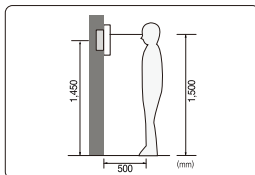
- In some cases there is occurrence of product destruction, malfunction, noise mixing and picture quality deterioration due to mixing of other tool's induced, voltage or thunder with communication wiring of monitor/camera, monitor/extended monitor.
- Do not wire with power line such as outdoor wiring or AC power, or phones and other tools.
- You cannot use it if you incorrectly wire the AC voltage between monitor/camera, monitor/extended monitor.
- Call the store or agency where you purchased this product and consult to solve the problem.
- Beware that unfixable damage might be caused due to authorizing AC voltage on communication wiring of monitor/camera, monitor/extended monitor.
- Do not ever disjoint this product. It may cause electrocution accident when touching high-voltage circuit inside this product.
- Outside power authorizing this product must be confirmed of product description and use rated voltage.
- Beware that if higher voltage is authorized, unfixable damage might be caused due to product destruction.
- Power must be connected to domestic voltage (product rated voltage) consent or interior wiring.
- If connected to other motive power or inverter-type power, product destruction, noise mixing, and picture distortion may occur.
- Do not drop this product. Glass is used for monitor and might break, or cause other circuit inferiority.
- In such case, immediately turn down the power switch, and call to consult agency or store in which this product was purchased.
- Keep away from any conditions where water splatters or falls. Do not place anything containing water like a vase on the product.
- If you install a product nearby an antenna used for broadcast media, image could be distorted or mixed with a voice so that it is likely not to work properly in some functions.
- Avoid installing near tools with strong electromagnetic waves such as microwaves and cell phones, as it may cause a picture distorted or a voice with a noise. In that case, the product is likely not to work properly in some functions.
- Do not install monitor in following places.

① Above or around water heater, rice-cooker, heater	② Place exposed to direct rays of the sun
③ Place with temperature below 0°C such as cold store	④ Place with high humidity such as bathroom, washroom, heated room
⑤ Place with a lot of gas, dust, smoke	⑥ Dangerous place with sprays of water or chemicals
- Do not wipe with insecticide, drugs or chemicals such as thinner and alcohol, or it may damage the surface of this product.
- Beware of occurrence of image quality deterioration or malfunction from cause of humidity due to penetration of chemicals or water into camera's urea resins.
- As in the picture, it prevents temperature difference of camera (outside) and monitor (inside), and removes dew condensation caused by humidity of camera window.
- Camera must be installed when wall cement is completely dry.
- When product is installed in winter below -5°C, wait for approximately 2 hours to connect. Dew formation in monitor and camera due to temperature difference inside and outside may cause product defect.
- Avoid installing monitor and camera in place directly exposed to heat or where gas noxiousness is highly occurring.



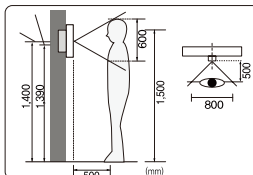
Installation Location

■ Monitor installation location



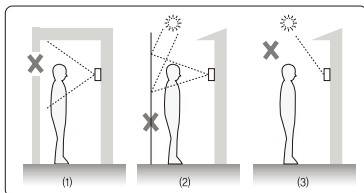
· Recommended installation height is about 1,500mm where screen center is at eye level. In this case, wall-hanging metal center (center of piping) is 1,450mm above ground level.

■ Camera installation location



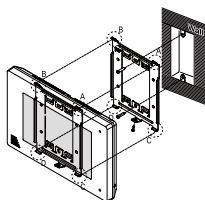
· Recommended installation height of door camera is where lens is about 1,400mm above the floor. In this case, camera stack center (Buried box) is above 1,390mm above ground level.

■ Caution of camera installation



- Avoid installing camera exposed to direct sunlight or lights.
- Back light or shadow on visitor's face may occur difficult recognition.
- Avoid installing camera in places such as the following picture.
 - (1) Place illuminating sky as background
 - (2) Place with white wall reflecting direct ray of light
 - (3) Place with direct ray of light

■ Monitor installation



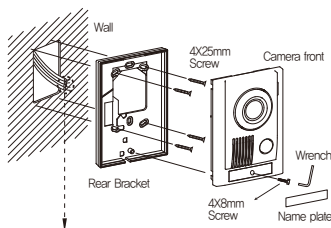
■ Directly connecting cut-off power cord with power wire

- 1) Personal electrical work must be avoided. Please find local installer or electrician for installation.
- 2) power cords must be insulated with insulation tape after the work.
[Exposed wires may cause fire or electric shock.]
- 3) Highly recommend to cut main power supply off before electrical work.

- 1) Remove metal wall hanger bracket behind monitor.
- 2) Install metal wall hanger bracket on 1 type box or wall with attached screw.
- 3) Connect wiring to monitor back terminal referring to product connection diagram.
- 4) Hang monitor on metal wall hanger bracket
- 5) Test the product status if the monitor is both plugged in and switched on.

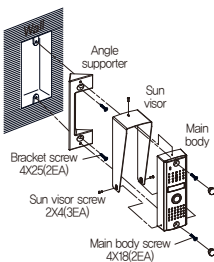
■ Door camera installation

KC-MC32(D1)

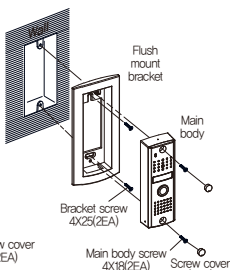


KC-MC11(D1)

Surface mount type



Flush mount type

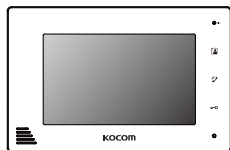


※When using angle supporter,
if main body screw(4X18) does not fit, please use spare screw(4X20)

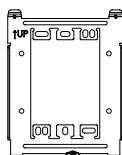
※ After fix the rear bracket with 4 screw, put the Door Camera into the grooves of rear bracket, and then fix it with hexagon screws and stick the finishing materials.

Components of Product

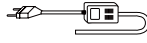
■ Monitor



■ Wall hanger



■ Wire

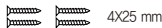


· DC 12.4V Adapter

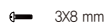


· DC Door Lock Wire

■ Screws



· Wall Hanger Fixing Screws



· Screw for fixing monitor

■ Door Camera

[KC-MC32(D1)]



Bracket



4x25mm



4x8mm



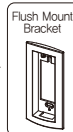
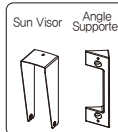
0

Wall to bracket screws

Camera to bracket screw

"L" wrench
screw cover

[KC-MC11(D1)]



○ Screws Cover (2EA)

■ Sun visor screw
(2x4mm 3EA)

■ Bracket screw
(4x25mm 2EA)

■ Main body screw
(4x18mm 2EA)

※ In case of Surface mount type, 'Sun Visor' and 'Angle Supporter' are packed together with the 'product'. Flush mount type includes 'flush mount bracket'.

Specifications

Monitor	Model No.	KCV-D372(D1)	
	Power Source	DC 12V ±3V	
	Power Consumption	Stand by 0.8W(±20%), In load 19W(±20%)	
	Operating Temperature	0℃ ~ +40℃	
	LCD	7" Digital LCD (NTSC / PAL Auto Switching)	
	Communication System	Handsfree type	
	Wiring	Door camera wiring : 2 Wires (Non Polarized) Extension monitor wiring : 2 Wires (Polarized)	
	Mount Type	Surface mount	
	Dimension	222(W) X 144(H) X 26(D) mm	
Door Camera	Model No.	KC-MC32(D1)	KC-MC11(D1)
	Resolution	0.41M	0.41M
	Power Source	DC 16V±2V(Power from Monitor)	
	Power Consumption	Max. 3W	
	Operating Temperature	-10℃ ~ +50℃	
	Dimension	110(W) x 158(H) x 39(D)mm	40(W) x 120(H) x 22(D)mm
	Angle of Lens	Diagonal 90 °	

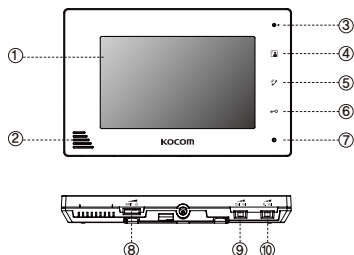
■ Max wiring distance

Type	Connection Condition	Railway line type and distance				
Line Type	Cross Section (mm ²)	0.3	0.5	0.8	CAT5	
	Dimension ϕ (mm)	0.6	0.8	1.0		
Distance	Monitor~Camera Monitor~Extension Monitor	100	120	150	100	(m)

Name and Functions of each part

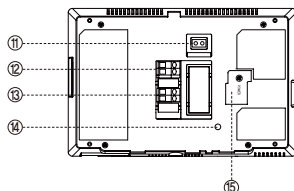
■ Monitor

· Front



- ① Monitor screen (LCD) : Output of image sent from camera.
- ② Speaker ③ Microphone
- ④ Monitor button : Push this button to check around camera when inside, and image is shown for 60 seconds.
(Voice intercepted between camera and monitor)
- ⑤ Operating state lamp : It flashes when door camera calls and turns on when talking.
- ⑥ Speak button : Use this button to start / stop speaking.
- ⑦ Open door button : Use this button to open front door with connected door switch.
- ⑧ Brightness adjustment volume : Adjusting LCD screen brightness to use.

· Back



- ⑨ Call volume adjustment switch : Adjusting call sound in 3 steps [high, medium, low] to use. (In shipment : [medium])
※ Cannot adjust call sound to "none".
- ⑩ Speaking volume adjustment switch: Adjust speaking volume transmitted from camera to monitor in 3 steps [high, medium, low] to use.
(In shipment : [medium])
- ⑪ DC door switch terminal : Connects DC door switch.
- ⑫ Camera terminal : Connects camera with 2 wire nonpolar.
- ⑬ Extension monitor terminal : Connects extension monitor with 2 wire nonpolar.
- ⑭ Color adjustment volume : Adjust color on LCD screen. (In shipment, adjusted to standard color)
- ⑮ Power input section: Input DC power and fix power cord.

Product functions and features

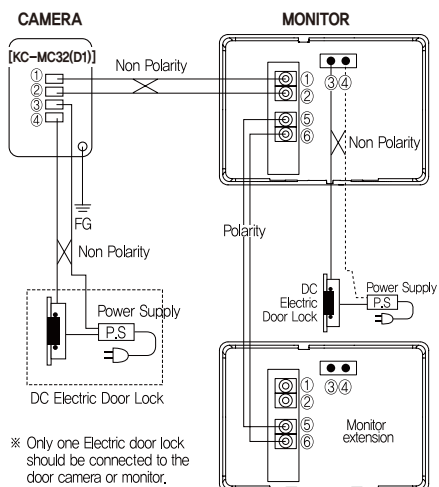
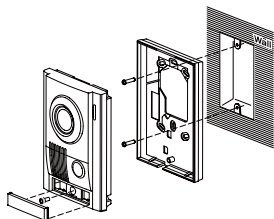
1. Display product working condition with OSD : Display call condition, monitor condition, speaking condition, open door condition, Tint, Bright, error message on OSD.
2. When no signal on image, converts to standby condition.
3. Very low consumption of electric power in standby : 0.7W of electric power consumed in standby condition, reducing electric charges.
4. Use of Digital 7" LCD Panel : Image is very clear and quality excellent due to use of digital LCD Panel.
5. Nonpolar 2 wire method between camera and monitor: Can be easily installed due to nonpolar 2 wire method between camera and monitor.
6. Extension monitor's 2 wire method : Extension monitor can be easily installed with 2wire polar.
7. Long distance wiring : Can install up to 150cm between camera and monitor.
8. Can connect door opener to monitor and camera
 - 1) Can connect DC door opener to camera.
 - 2) Can connect DC type door opener to monitor.
 ※ Beware of simultaneous function of door opener connected to camera and monitor.
9. Automatic confirmation tool of connection between camera and monitor

: Connect wiring between camera and monitor, authorize power, and when normally wired, · Tee~dee~"sound (1 times) will be on. If disconnected or camera is malfunctioning, "Tee~dee~tee~dee" sound (2 times) will be on for 5 seconds, and screen error (Please check camera or connection) message will be on as LED switches off on monitor, enabling to confirm wiring condition between camera and monitor.

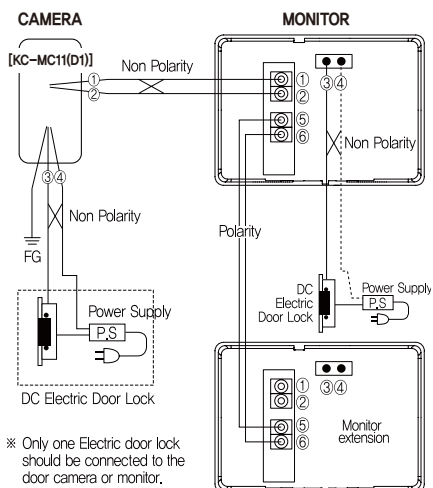
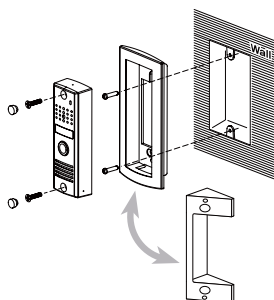
※ Turn AC power switch OFF, ON before taking measures for above causes.

Camera installation

■ KC-MC32(D1)



■ KC-MC11(D1)



Product connection diagram

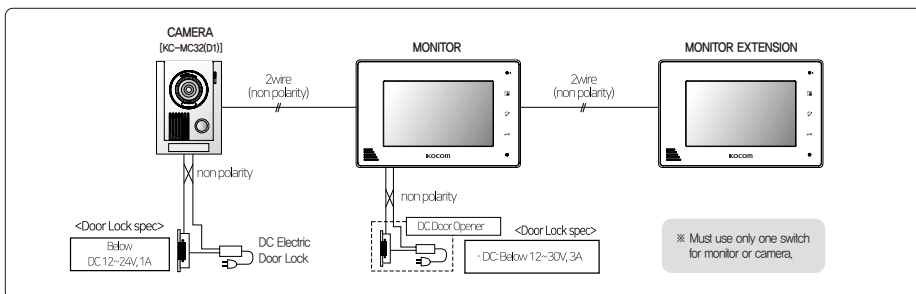
- If you connect other types of cable in the middle of communication cable wiring between monitor/camera, monitor/extension monitor or divide parallel 2 wire to 1 pattern, image screen may shake or quality may deteriorate. Also, wire not used in communication wiring must be deleted or connect product.

■ Product connection diagram

- Beware in installation of pushing open door button, which causes DC switch connected to camera and DC switch connected to monitor to motion.
- Switch connecting to camera can only use DC switch, and switch connecting to monitor can use DC type.

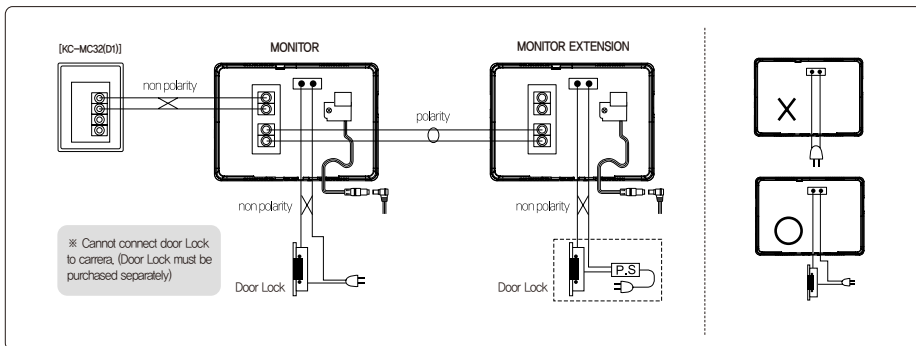
※ Door opener caution total product wiring diagram Connection method, Method for use as below.

■ Wiring diagram

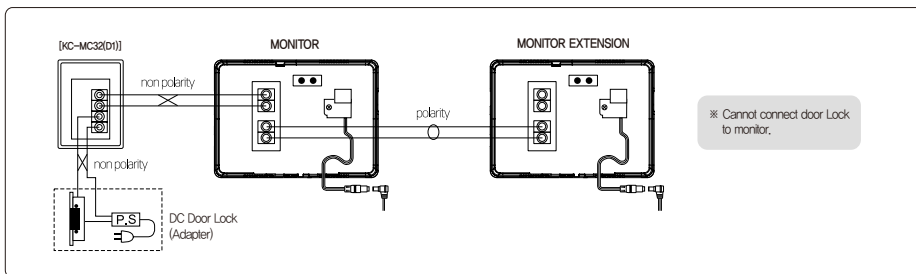


■ Wiring diagram on monitor

■ Caution of Door lock

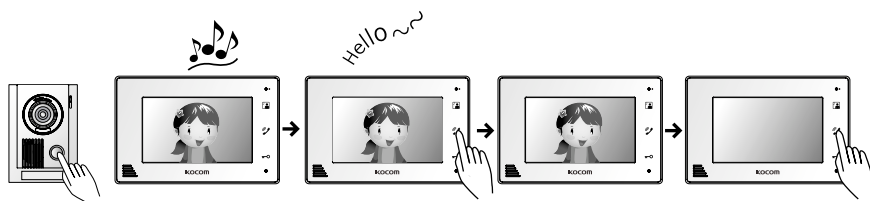


■ Door opener wiring diagram on door camera in DC



Instructions for operation

■ Calling from camera



※ Push call button from camera. You can hear small call sound toward camera and check the call.

※ You can hear call sound from all connected monitors, and camera image comes out on screen.

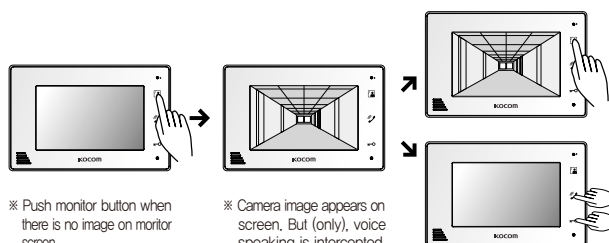
※ Push monitor button to convert to monitor tool for 60 seconds.
※ Push speak button to speak with camera.

※ Push open door button to open front door. About 5 seconds after pushing the button, call ends automatically.

※ Call ends when you push open door button and speak button once again.

※ Open door opener works only in speaking condition, and does not work when no image is on screen.

■ Calling from camera



※ Push monitor button when there is no image on monitor screen.

※ Camera image appears on screen. But (only), voice speaking is intercepted.

※ Push monitor button once more, and image is intercepted. Do not push the button and after 60 seconds image is intercepted automatically.

※ Push door open button after speak button, and front door opens. About 5 seconds after pushing the button, call ends automatically.

■ Monitor screen time

- Not pushing speak (or monitor) button after calling from camera : 30 seconds
- Pushing monitor button to check around camera : 60 seconds
- Push speak button to speak with camera : 3 minutes

■ Screen brightness, call sound, speak volume adjustments

- Screen brightness adjustment : Screen brightness variable to volume.
- Call sound adjustment : Call sound variable in 3 steps (high/medium/low).
- Speak volume adjustment : Speak sound (monitor output voice) variable in 3 steps (high/medium/low).

Warranty

➤ To receive after service, have the following ready before you contact our branches.

1. Name of the product.
2. Model number of the product.
3. The area of problem.
4. Phone number and address at which you can be contacted.

Warranty Card

PRODUCT	
MODEL	KCV-D372(D1)
DATE PURCHASED	
WARRANTY PERIOD	
AGENCY ADDRESS	

➤ KOCOM Warranties the original purchaser of this product as follows.

- 1) This product is produced under strict quality control and inspection procedures.
- 2) If this product breaks down during proper use as a result of product defect, KOCOM will repair it within one year from date of purchase free of charge.
- 3) The following cases will be subject to charge, even during warranty period:
 - a. Breakdown during transport, or through careless treatment, by consumer.
 - b. Breakdown cause by unauthorized repair, or system modification.
 - c. Breakdown caused by natural disaster or power disorder.

➤ Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



www.kocom.com
E-mail : global@kocom.co.kr

This manual is based on the date as shown in the right and specifications are subject to change without notice for quality improvement

KCV-D372(D1)

W0720