

USER GUIDE

Pinhole type (Vandal-proof)

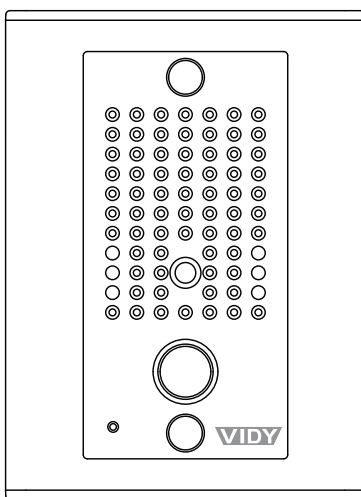


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1. Cautions for safety

For safe use, please stick to the following cautions.

- Please, save this manual after reading these instructions carefully.
- This Cautions for Safety may include items that are not contained in specifications of the product that consumer purchases.
- If you need assistance with the set-up or operation, please contact with A/S center.
- Read and understand all instructions to set up rightly.

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 need more attention including high voltages, electric shock, danger, warning
 Sign to tell you that you can't disassemble this unit.	 Sign to tell you that you must unplug the unit.

Caution

Cautions for set-up



- The law limits distributing the power lines 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.



- The work of distributing wires needs skills and experiences. So please, for assistance, contact your dealer or call service center.
- The communication lines 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 lines 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.
- Unplug this device when you try to move it to another place. 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 powder 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 cord 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 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



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- Check the suitability of the lines for installing when you use the existing lines.
 - 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.



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- Unplug electric wire and communication lines from the units before moving to another place.

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.
- Do not modify the unit.
- Open the main gate after checking ID if the image and sound system do not work. Call A/S



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- 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.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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 ALT.
- 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 lines with the hook of the wall-mounted type when installing.
- Connect the lines after peeling the wires properly.
- Do not distribute signal line with AC line.
- Use the designed driver to connect the lines 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.

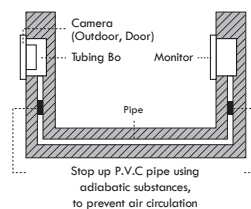
Cautions

- 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.
- If installed near transmission antenna such as broadcasting station, electric wave may mix and cause picture distortion or voice mixing.
- Avoid installing near tools with strong electromagnetic waves such as microwaves and cell phones, or it may cause picture distortion.

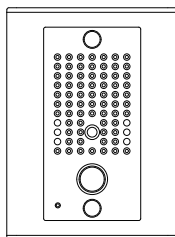
Do not install monitor in following places.

- 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

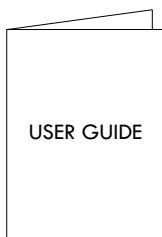


- Do not wipe with insecticide, drugs or chemicals such as thinner and alcohol, or it may damage the surface of this product.
- Beware of occurrence of image quality deterioration or malfunction from cause of humidity due to penetration of chemicals or water into camera's urea resins.
- As in the picture, 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.

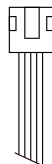
2. Package components list



①



②



③



④-1



④-2



④-3



⑤

① **Product**

② **User Guide**

③ **4P Connector cable - 1ea**

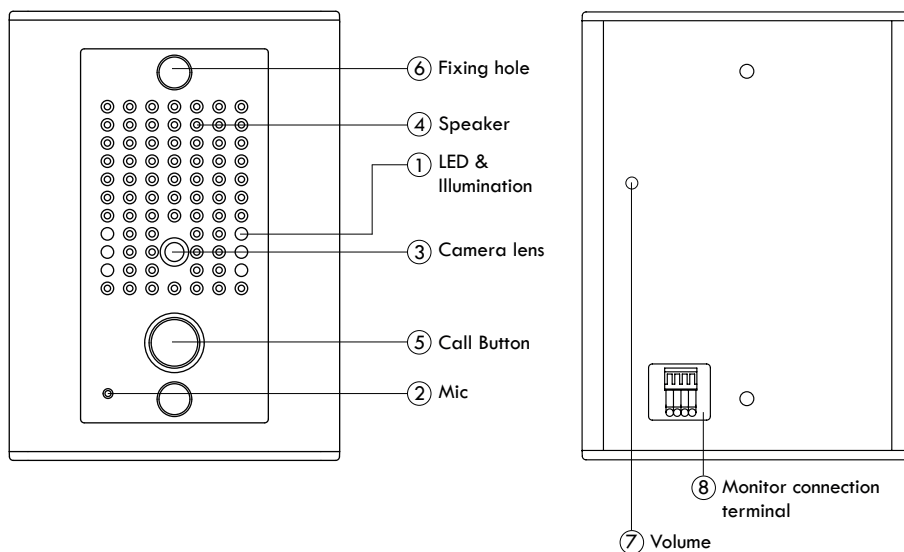
④-1. **Product fix screw** (SCREW FH3.5 x 30L) - **2ea**

④-2. **Product fix screw** (SCREW BOLT 4 x 30L M4 x 30L) - **2ea**

④-3. **Screw cover** (SCREW CAP) - **2ea**

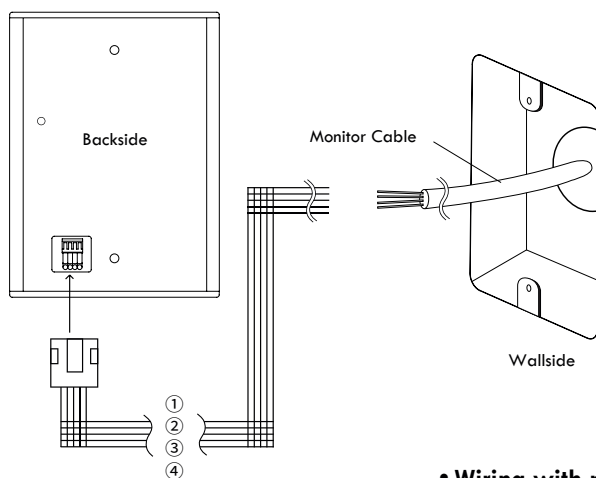
⑤ **Wall use** (ANCHOR BOLT) - **2ea**

3. Components and Description



1. LED & Illumination	IR LED used to verify visitors during night time
2. Mic	Internal microphone
3. Camera lens	Hidden camera lens for vandal-proof feature
4. Speaker	Speaker
5. Call button	Press to call indoor monitor
6. Fixing Hole	Use screw cap to to hide screw after installation
8. Volume	Volume
9. Monitor connection terminal	Insert cable for monitor connection

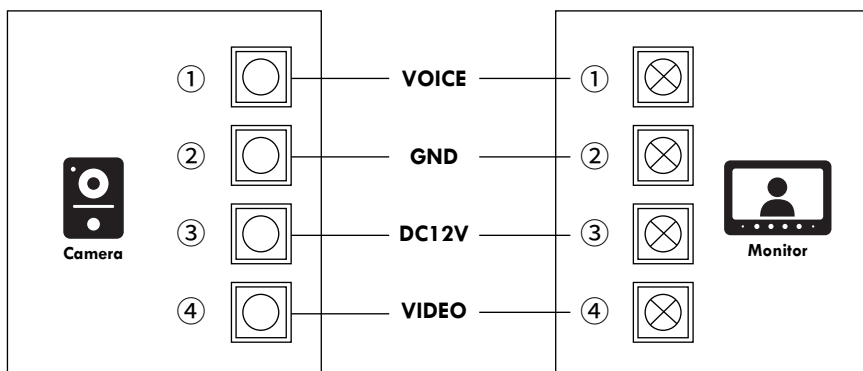
4. Wiring



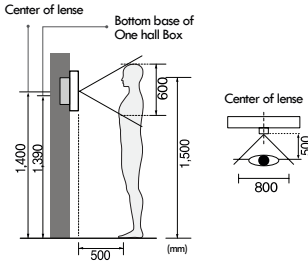
• Wiring with monitor cable

Used enclosed cable to insert pin, and extend connection with additional cable.

Connection from Monitor to Door phone



5. Installation



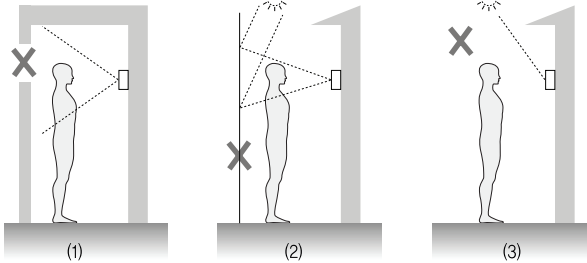
• Camera installation location

camera installation height is when lens is about 1,400mm above the floor.

In this case, camera stack center (piping box) is above 1,390mm above ground level.

• Standard installation in height

* The above angle of view is based on the KC-MC24 camera. The numbers vary according to the type of camera.

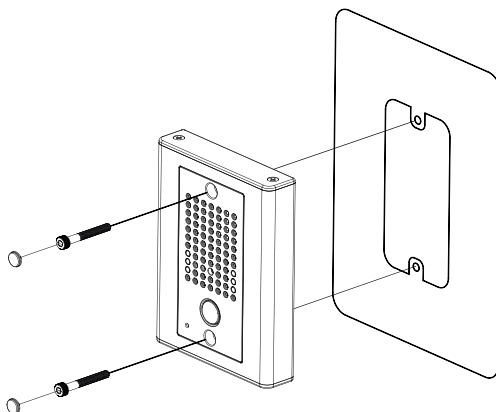


• Caution of camera installation

- Avoid installing camera exposed to direct ray of light (and sun).
- Beware backlight and darkness of visitor's face, which makes identification difficult.
- 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

- Use enclosed screws and bracket to install on wall.
seal screw with screw caps.



6. Specifications

Dimensions (mm)	88(W) X 120(H) X 20(D)
Power source	DC12V (From Monitor)
Image sensor	Color CMOS (1/4 inch)
Min. illumination	0.1Lux (Up to 300mm)
Distance	28m (0.5Ø) / 50m (0.65Ø)
Gross weight	405 (Unit : g)
Operation temp.	-15°C ~ +50°C
Wiring	4 Wires with polarity
Camera view	Horizontal 58°, Vertical 44°

