

## Getting Started

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DECT Repeater

Model No. **VL-FKD2**



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Thank you for purchasing a Panasonic product.  
Please read this manual before using the product and save it for future reference.

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### Panasonic Corporation

1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan

<http://www.panasonic.com>

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\*PNQX8955ZA\*

**PNQX8955ZA** C0319MM0

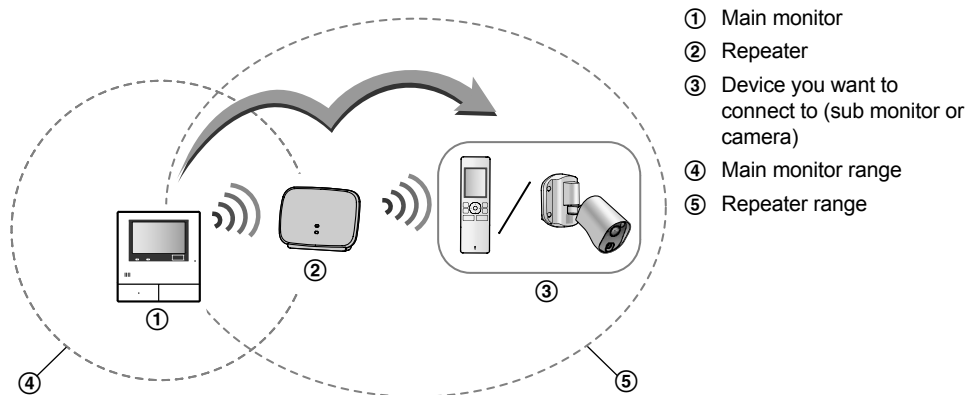
# Introduction

This product is an additional product designed to be used with the following Panasonic Video Intercom Systems.

- VL-SWD501/VL-SWD501U (Main monitor station: VL-MWD501)
- VL-SWD272 (Main monitor station: VL-MWD272)

(The corresponding models are subject to change without notice.)

- By installing this product, you can extend the range of your Video Intercom System to include areas where reception was previously not available.  
The product extends the range in all directions, allowing several floors to be covered.
- You must register this product with your Video Intercom System before it can be used.
- Keep an appropriate distance from the main monitor to maximise the range of your Video Intercom System. Find the appropriate location by checking the  $\nabla$ /ID indicator after registering this product with your Video Intercom System. If the  $\nabla$ /ID indicator lights red or orange, re-position this product in a place where the  $\nabla$ /ID indicator lights green.



- When used with the Video Intercom System VL-SWD501 series or VL-SWD272 series, a maximum of 2 repeaters can be used. Because the number of repeaters that can be used may differ depending on the Video Intercom System series used, see the Operating Instructions of the Video Intercom System for more information.
- The illustrations in the supplied manual(s) may vary slightly from the actual product.
- In this document, the suffix of each model number (e.g., the "BX" in "VL-FKD2BX") is omitted unless necessary. When the suffixes are used to describe models (e.g., "BX models"), the suffixes refer to all models in the series.

## Product names used in this manual

Model No.	Product name	Name in this manual
VL-FKD2*1	DECT repeater	Repeater
VL-MWD501 VL-MWD272	Main monitor station	Main monitor
VL-WD613	Wireless monitor station	Sub monitor

Model No.	Product name	Name in this manual
VL-WD812*2	Wireless sensor camera	Camera

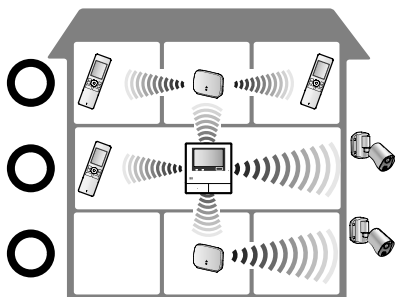
\*1 The product label reads as follows: VL-FKD2EX or VL-FKD2CX

\*2 The product label reads as follows: VL-WD812EX

### Signal range and repeater installation example

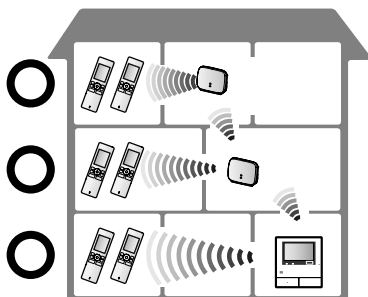
#### ■ Using each repeater connected separately

This extends signals away from the main monitor. Because signals are sent through the main monitor, different types of devices can be connected to each repeater. (For example, sub monitors can be connected to one repeater and cameras can be connected to another.) This is useful when you want to connect to different types of devices over shorter distances.



#### ■ Using 2 repeaters connected together

This extends the signal away from the main monitor by sending signals directly between repeaters. Because the signals are sent between repeaters, the same type of device must be connected to both repeaters (all sub monitors or all cameras). This is useful when you want to connect to the same type of devices over long distances.



## Accessory information

### Supplied accessories

Accessory item	Quantity
AC adaptor/PQLV219CE*1	1
AC adaptor/PQLV219E*1, *2	1

\*1 Supplied with VL-FKD2BX. Appropriately dispose of the AC adaptor that will not be used.

\*2 Supplied with VL-FKD2CX and VL-FKD2CX1.

#### Note:

- You will need the following additional items (locally procured) to install the product on the wall.
  - Screws x 2 (for wall mounting):  
Prepare the screws according to the material, structure, strength and other factors of the mounting area and the total weight of objects to be mounted.

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## For your safety

To prevent severe injury and loss of life/property, read this section carefully before using the product to ensure proper and safe operation of your product.



### WARNING

#### Preventing fire and electric shock

- Use only the power source marked on the product. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Use only the specified AC adaptor.
- Do not attempt to disassemble or modify this product. Contact an authorised service centre for repairs.
- Never touch the AC adaptor with wet hands.
- Do not touch the AC adaptor during an electrical storm.
- Do not perform any actions (such as fabricating, twisting, stretching, bundling, forcibly bending, damaging, altering, exposing to heat sources, or placing heavy objects on the AC adaptor) that may damage the AC adaptor. Using the product with a damaged AC adaptor may cause electric shock, short circuits, or fire. Contact an authorised service centre for repairs.
- Do not overload the power outlet above the specified levels. Overloading by having many connections on one power outlet may cause heat generation, resulting in a fire.

- Never put metal objects inside the product. Never spill any liquid on the product.  
If metal objects enter the product or the product becomes wet, unplug the product from the power outlet and contact an authorised service centre.
- Do not use a microwave oven or other devices, such as electromagnetic cookers to speed up the drying process of any parts of the product.
- Completely insert the AC adaptor into the power outlet. Failure to do so may cause electric shock and/or excessive heat resulting in a fire. Do not use damaged AC adaptors or power outlets.
- Regularly remove any dust, etc., from the AC adaptor by unplugging it from the power outlet, then wiping it with a dry cloth. Accumulated dust may cause an insulation defect from moisture, etc., resulting in a fire.
- Unplug the product from the power outlet if the product emits smoke, an abnormal smell or makes unusual noise, or if the product has been dropped or physically damaged. These conditions can cause fire or electric shock. Confirm that smoke has stopped emitting and contact an authorised service centre.
- Hold the main body (not the metal parts) of the AC adaptor when unplugging it. Unplugging the AC adaptor while holding its cord or the cord's plugs may result in fire, electric shock, or injury.

#### Preventing accidents

- Do not use the product in health care facilities if any regulations posted in

the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF (radio frequency) energy.

- Do not install or use this product near automatically controlled devices such as automatic doors and fire alarms. Radio waves emitted from this product may cause such devices to malfunction, resulting in an accident.
- Consult the manufacturer of any personal medical devices, such as pacemakers or hearing aids, to determine if they are adequately shielded from external RF (radio frequency) energy. (The product operates in the frequency range of 1.88 GHz to 1.90 GHz, and the RF transmission power is 250 mW (max.).)



## CAUTION

### Preventing fire and electric shock

- Do not use the product in areas that are exposed to rain, moisture, steam, or oily smoke, or areas that have excessive dust.

### Preventing accidents, injuries, and property damage

- Do not use the product in unstable areas or areas prone to strong vibrations.

When mounting the product to a wall, install the product securely adhering to the instructions in this manual to prevent it from falling off the wall.

Avoid installing onto low-strength walls, such as gypsum board, ALC (autoclaved lightweight concrete), concrete block, or veneer (less than

18 mm thick) walls. These may cause the product to fall, resulting in damage to the product or injury.

## Important safety instructions

When using your product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool.
2. Use only the AC adaptor indicated in this manual.

### SAVE THESE INSTRUCTIONS

## For best performance

### Location/avoiding noise

The repeater and other compatible Panasonic units use radio waves to communicate with each other. (The product operates in the frequency range of 1.88 GHz to 1.90 GHz, and the RF transmission power is 250 mW (max.).)

- Install the repeater within the main monitor range of the Video Intercom System in an indoor environment. We recommend installing the repeater in a raised position (such as on a wall).
- For maximum coverage (approx. 100 m) and noise-free communications, install your repeater:
  - at a convenient, high, and central location with no obstructions between the sub monitor (or camera) and repeater in an indoor environment.
  - away from electronic appliances such as TVs, radios, personal computers, wireless devices, or digital cordless phones.
  - facing away from radio frequency transmitters, such as external antennas of mobile phone stations. (Avoid installing the repeater near a window.)
- Coverage and voice quality depends on the local environmental conditions.
- If the reception for a repeater location is not satisfactory, move the repeater to another location for better reception.

## Environment

- Keep the product away from electrical noise generating devices, such as fluorescent lamps and motors.
- The product should not be exposed to direct sunlight.
- Do not place heavy objects on top of the product.
- When you leave the product unused for a long period of time, unplug the product from the power outlet.
- The product should be kept away from heat sources such as radiators, cookers, etc. It should not be placed in rooms where the temperature is less than 0 °C or greater than 40 °C. Damp basements should also be avoided.
- Do not install the product in locations that are suspect to sudden changes in temperature. Failure to do so may cause condensation to form on the product causing malfunction.
- Even when the repeater and sub monitor (or camera) are used within 100 m of each other, obstructions can cause weak signals, noise, interrupted transmissions, distorted images and slow image refresh rates. Obstructions can include:
  - Metal doors or metal shutters.
  - Heat insulation including aluminium foil.
  - Concrete walls or walls made of galvanized iron sheet.
  - If the sub monitor is being used in a different building, or a different part of the house, i.e. a different floor to the where the main monitor has been installed.
  - Many walls.
  - Double insulated glass windows.
- Operating the product near electrical appliances may cause interference. Move away from the electrical appliances.

## Other important information

- The AC adaptor is used as the main disconnect device. Ensure that the power outlet is installed near the product and is easily accessible.

### Information on Disposal in other Countries outside the European Union

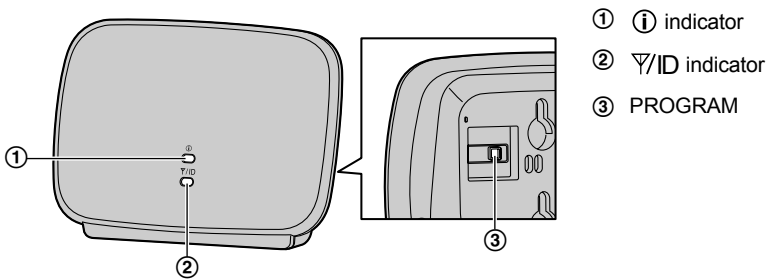


Above symbol (①) is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.











### Others

- It is prohibited to disassemble or modify this product. Contact the dealer where you purchased this product for repair.
- When power fails, this product cannot be used.

# Controls



## Understanding the ① indicator and ∇/ID indicator

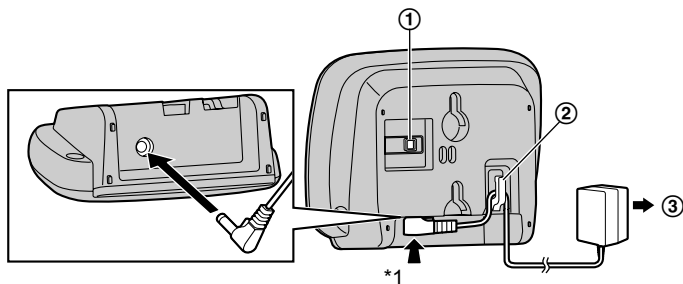
Indicator	Light status	Meaning	
① indicator	 Lit green	Registration with the main monitor is complete and the repeater can send signals.	
	 Flashing green	Signals are being sent.	
	 Lit orange	Signals are not being sent.	
∇/ID indicator	 Flashing green	Currently registering to the main monitor.	
	 Off	Not registered to the main monitor.	
	 Lit green	 Strong  Weak	Indicates the signal level of the main monitor. • Determine the installation location of the repeater by checking the signal level shown with the indicator.
	 Lit orange		
	 Lit red		
	 Flashing red	Signals do not reach the repeater and it should not be installed in this location. (Out of range.)	

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## Installation/Registering the repeater to the main monitor

- 1 Repeater:** Connect the AC adaptor, and plug the AC adaptor into a power outlet.
  - Use only the supplied Panasonic AC adaptor (→ page 3).
  - When the repeater is turned on, the ⓘ indicator lights in orange.



① PROGRAM

② Hook

③ 220-240 V AC, 50/60 Hz

\*1 Press plug firmly.

- 2 Main monitor:** Perform the registration operations for the repeater. (→ Operating Instructions of the Video Intercom System)
  - The next step must be completed within 120 seconds.
- 3 Repeater:** Press PROGRAM (①) for about 3 seconds.
  - If the indicators do not light green, re-position the repeater in a place where the indicators light green.

### Note:

- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- The AC adaptor should be connected to a vertically oriented or floor-mounted AC outlet. Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.



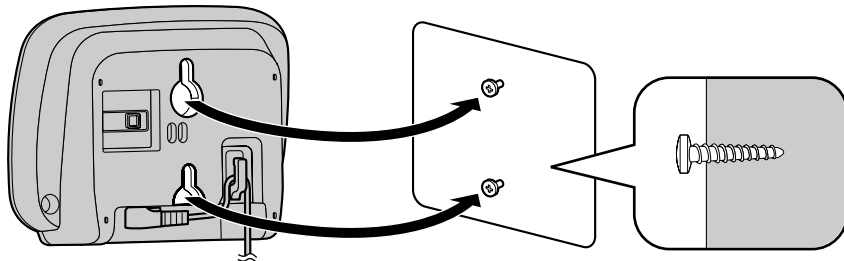
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## Wall mounting

Make sure that the wall is strong enough to support the weight of the repeater.

- 1 Place the reference for wall mounting on the wall to mark the 2 screw positions.
- 2 Install the 2 screws (locally procured) into the wall.
  - Make sure that the screw heads are at the same distance from the wall.
  - Install the screws perpendicular to the wall.
- 3 Hook the repeater on the screw heads.

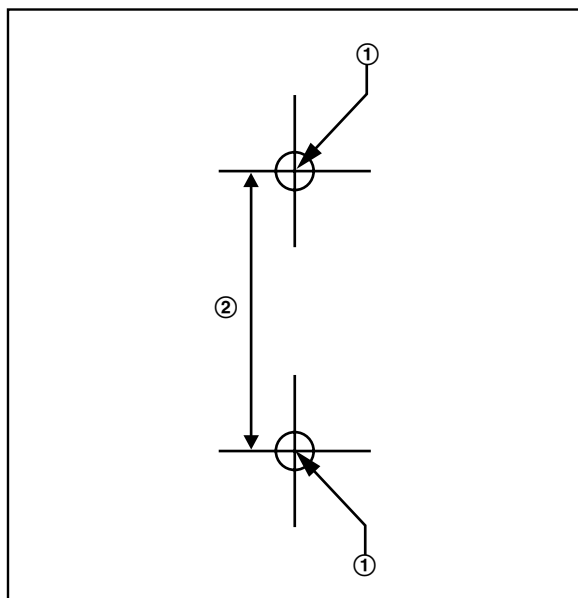


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### Reference for wall mounting

Print the following guide and use it as a reference for wall mounting.

- Make sure to set the print size to correspond with the size of pages in this manual. If the dimensions of the printed paper are not exactly the same as the dimensions of this guide, use the measurements indicated in the guide.



- ① Install screws in these positions.
- ② 37 mm

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## Troubleshooting

Problem	Cause/solution
The repeater does not work.	<ul style="list-style-type: none"><li>● When the indicators do not light, the AC adaptor is not connected properly. Check the connections.</li><li>● When the indicators do not light green, move the repeater closer to the main monitor.</li><li>● When the <math>\nabla</math>/ID indicator does not light, the registration with main monitor has not completed successfully. Re-register the repeater again.</li></ul>
The transmission condition (for images and sound) of the sub monitor or camera does not improve even when a repeater is installed.	<ul style="list-style-type: none"><li>● The sub monitor or camera is too far from the repeater. → Install the sub monitor or camera within signal range of the repeater.</li><li>● The repeater is too far from the main monitor. (The <math>\nabla</math>/ID indicator is lit or flashing in red.) → Install the repeater in a location where the <math>\nabla</math>/ID indicator is stable and lit in green or orange.</li><li>● The repeater is too close to the main monitor. → When the repeater is too close to the main monitor, the sub monitor or camera only receive signals from the main monitor, thus making the repeater ineffective. Install the repeater in a location where the sub monitor or camera are used, and is as far away from the main monitor as possible while still staying within signal range of the main monitor.</li></ul>

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## Cleaning

Wipe the product with a soft, dry cloth.

For excessive dirt, wipe the product with a slightly damp cloth.

### Important:

- Do not use any cleaning products that contain alcohol, polish powder, powder soap, benzene, thinner, wax, petroleum, or boiling water. Also do not spray the product with insecticide, glass cleaner, or hair spray. This may cause a change in colour or quality of the product.

### Cleaning the AC adaptor:

For safety, disconnect the AC adaptor from the power outlet before cleaning.

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## Specifications

<b>Power source</b>	AC adaptor (PQLV219CE/PQLV219E) 6.5 V DC, 0.5 A
<b>Power consumption</b>	During standby: 1.5 W During operation: 2.3 W (when transmitting)
<b>Dimensions (mm) (height × width × depth)</b>	Approx. 82×111×39
<b>Mass (weight)</b>	Approx. 88 g (excluding the AC adaptor)

<b>Operating environment</b>	Ambient temperature: approx. 0 °C to +40 °C Relative humidity (non-condensing): up to 90 %
<b>Frequency range</b>	1.88 GHz to 1.90 GHz
<b>Transmitting range</b>	Approx. 100 m (line-of-sight distance from the main monitor)

**Note:**

- Design and specifications are subject to change without notice.
- Names, company names, product names, software names, and logos mentioned in this manual are trademarks or registered trademarks of the companies concerned.

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## General information

- In the event of problems, you should contact your equipment supplier in the first instance.

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### For Europe

**Declaration of Conformity:**

- Panasonic Corporation declares that the radio equipment type (VL-FKD2BX, VL-FKD2CX) is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

<http://www.ptc.panasonic.eu/doc>

**Contact to Authorised Representative:**

Panasonic Testing Centre  
Panasonic Marketing Europe GmbH  
Winsberggring 15, 22525 Hamburg, Germany

### Ecodesign information

Ecodesign information under EU Regulation (EC) No. 1275/2008 amended by (EU) Regulation No. 801/2013. From 1 January 2015.

Please visit here: [www.ptc.panasonic.eu/erp](http://www.ptc.panasonic.eu/erp)

Click [Downloads]

→ Energy related products information (Public)

Power consumption in networked standby and guidance are mentioned in the Web site above.

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### Graphical symbols for use on equipment and their descriptions

1		2		3		4		5		6	
7		8		9		10		11		12	

1. Alternating current (A.C.) 2. Direct current (D.C.) 3. Protective earth 4. Protective bonding earth 5. Functional earth 6. For indoor use only 7. Class II equipment (equipment in which protection against electric shock relies on Double Insulation or Reinforced Insulation) 8. "ON" (power) 9. "OFF" (power) 10. Stand-by (power) 11. "ON"/"OFF" (power; push-push) 12. Caution, risk of electric shock

