

Installation Guide

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

By installing this unit, you can extend the range of your phone system to include areas where reception was previously not available.

The unit extends the range in all directions, allowing several floors to be covered.

Important

- This unit is an accessory unit for use with the following series of Panasonic SIP Cordless Phone:
KX-TGP500/KX-TGP550
- You must register this unit with your base unit before it can be used.
- The unit is compatible only with base units/handsets whose suffix are ones in the following table or later.

Suffix table

KX-A405 DECT repeater	KX-TGP500/KX-TGP550 base unit	KX-TPA50 handset
KX-A405CE: B KX-A405UK: B KX-A405AL: B	KX-TGP500 B01: I	KX-TPA50 B01: F
	KX-TGP550 T01: J	
	KX-TGP500 B02: G	KX-TPA50 B02: C
	KX-TGP550 T02: G	
	KX-TGP500 B08: J	KX-TPA50 B08: F
	KX-TGP550 T08: K	
	KX-TGP500 B09: C	KX-TPA50 B09: C
	KX-TGP500 B61: C	KX-TPA50 B61: C

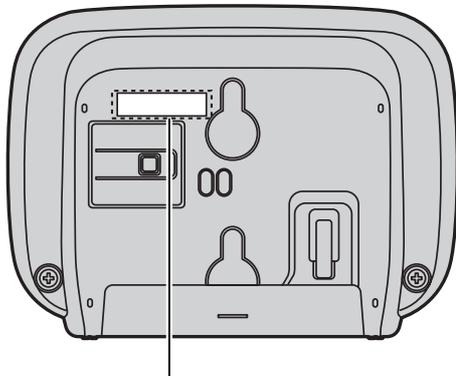
See page 5 for further information about the suffix.

The suffix is the 5th digit of the serial number on each unit. It starts from A to B, C, D....

Example: XXXXX

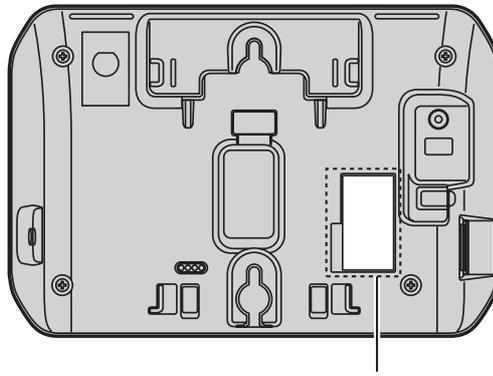
└─ 5th digit: suffix (by alphabet)

KX-A405 DECT repeater (back)



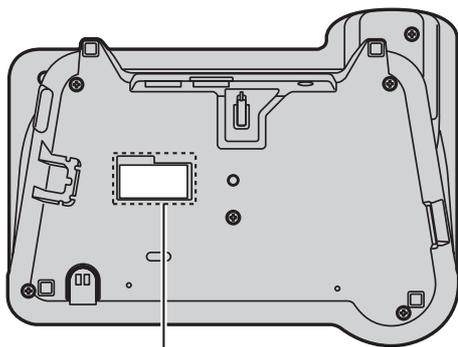
Serial number (S/N)

KX-TGP500 base unit (back)



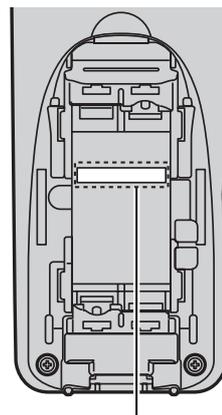
Serial number (S/N)

KX-TGP550 base unit (bottom)



Serial number (S/N)

**KX-TPA50 handset
(in the battery compartment)**



Serial number (S/N)

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.

The notices are classified as follows, according to the severity of injury or damage:

<u>WARNING</u>	This notice means that misuse could result in death or serious injury.
<u>CAUTION</u>	This notice means that misuse could result in injury or damage to property.

WARNING

Power connection

- Use only the power source marked on the product.
- Do not overload power outlets and extension cords. This can result in the risk of fire or electric shock.
- Completely insert the AC adaptor/power plug into the power outlet. Failure to do so may cause electric shock and/or excessive heat resulting in a fire.
- Regularly remove any dust, etc. from the AC adaptor/power plug by pulling it from the power outlet, then wiping with a dry cloth. Accumulated dust may cause an insulation defect from moisture, etc. resulting in a fire.
- Unplug the product from power outlets if it emits smoke, an abnormal smell, or makes an unusual noise. These conditions can cause fire or electric shock. Confirm that smoke has stopped emitting and contact your phone system dealer/service provider.
- Unplug from power outlets and never touch the inside of the product if its casing has been broken open.
- Never touch the plug with wet hands. Danger of electric shock exists.

Installation

- To prevent the risk of fire or electrical shock, do not expose the product to rain or any type of moisture.
- Do not place 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.
- Do not allow the AC adaptor to be excessively pulled, bent or placed under heavy objects.

Operating safeguards

- Unplug the product from power outlets before cleaning. Do not use liquid or aerosol cleaners.
- Do not disassemble the product.

Medical

- 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).)
- 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 energy.

CAUTION

Installation and location

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

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. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
3. Do not use the telephone to report a gas leak in the vicinity of the leak.
4. Use only the power cord indicated in this manual.

SAVE THESE INSTRUCTIONS

For best performance

Range extender location/avoiding noise

The range extender and other compatible Panasonic units use radio waves to communicate with each other.

- For maximum coverage and noise-free communications, place your range extender:
 - at a convenient, high, and central location with no obstructions between the handset and range extender in an indoor environment.
 - away from electronic appliances such as TVs, radios, personal computers, wireless devices, or other phones.
 - facing away from radio frequency transmitters, such as external antennas of mobile phone cell stations. (Avoid putting the range extender on a bay window or near a window.)
- Coverage and voice quality depends on the local environmental conditions.

- If the reception for a range extender location is not satisfactory, move the range extender 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 be kept free from excessive smoke, dust, high temperature, and vibration.
- 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.
- The maximum calling distance may be shortened when the product is used in the following places: Near obstacles such as hills, tunnels, underground, near metal objects such as wire fences, etc.
- Operating the product near electrical appliances may cause interference. Move away from the electrical appliances.

Routine care

- **Wipe the outer surface of the product with a soft moist cloth.**
- Do not use benzine, thinner, or any abrasive powder.

Other information

Notice for product disposal, transfer, or return

- This product can store your private/confidential information. To protect your privacy/confidentiality, we recommend that you erase information such as phonebook or caller list entries from the memory before you dispose of, transfer, or return the product.

Accessory information

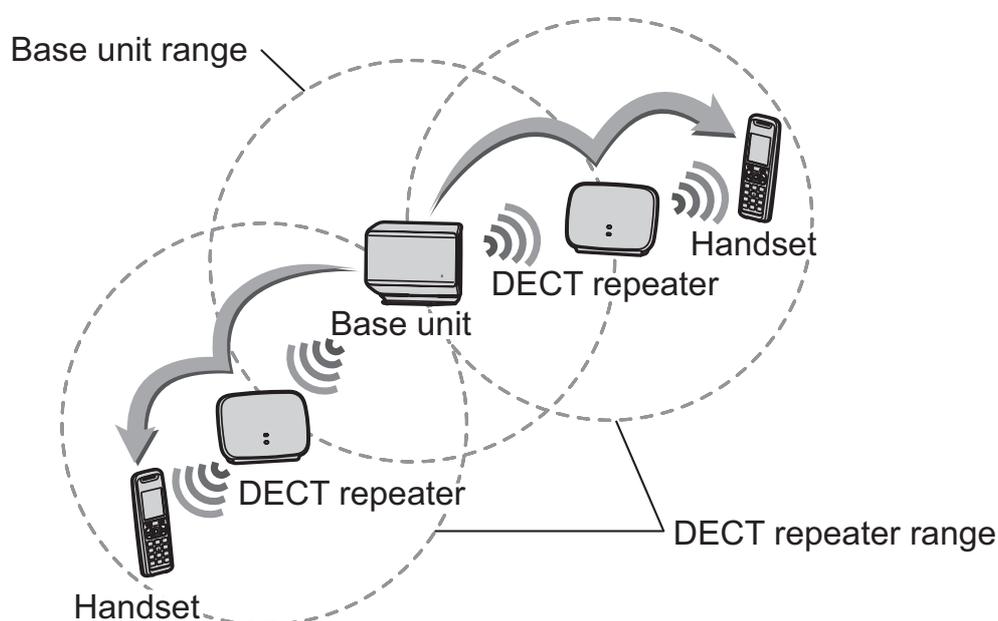
Supplied accessories

No.	Accessory item/Part number	Quantity
①	AC adaptor/PQLV219	1
②	Screws	2
③	Washers	2

For best performance

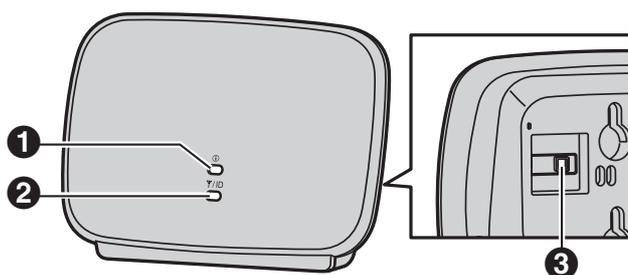
Placement

- Install the unit within base unit range in an indoor environment. We recommend installing the unit in a raised position (such as on a wall).
- Avoid positioning the unit close to objects that will interfere with reception, such as thick walls, radiators, metal shelving, etc.
- For maximum distance noise-free operation, place the unit away from electrical appliances such as TV, radio, personal computer, or other telephone equipment.
- Keep an appropriate distance from the base unit to maximise the range of your phone system. Find the appropriate location by checking the ∇ indicator. If the ∇ indicator lights red or amber, re-position this unit in a place where the ∇ indicator lights green.



- Up to 2 DECT repeaters can be registered to the base unit.

Controls



- ❶ ⓘ indicator
- ❷ ⚓ indicator
ID indicator
- ❸ [PROGRAM]

Understanding the ⓘ indicator and ⚓ indicator

Indicator	Light status		Meaning
ⓘ indicator	Green	On	<ul style="list-style-type: none"> • Within base unit range. The unit is ready for use.
		Flashing	<ul style="list-style-type: none"> • 1 handset is communicating with the base unit through this unit.
		Quick Flashing	<ul style="list-style-type: none"> • 2 handsets are communicating with the base unit through this unit.
	Red	On	<ul style="list-style-type: none"> • Out of base unit range.
		Flashing	<ul style="list-style-type: none"> • The unit is not registered to the base unit.
Off	<ul style="list-style-type: none"> • The power is off. (AC adaptor is not connected properly.) 		
⚓ indicator	Green	On	<ul style="list-style-type: none"> • Signal strength of the base unit is strong.
		Flashing	<ul style="list-style-type: none"> • The number of times the indicator flashes indicates the current ID of registered DECT repeaters. When it flashes green once, it indicates that the ID is currently set to 1. • The base unit is in DECT repeater range.
	Amber	On	<ul style="list-style-type: none"> • Signal strength of the base unit is weak.
	Red	On	<ul style="list-style-type: none"> • Out of base unit range. • The unit has assigned the ID to the DECT repeater.
		Flashing	<ul style="list-style-type: none"> • The number of times the indicator flashes indicates the ID that will be registered to the unit. When it flashes red once, it indicates that the ID will be set to 1.
Off	<ul style="list-style-type: none"> • The unit is not being used. • The power is off. 		

Installation/Registering the DECT repeater to the base unit

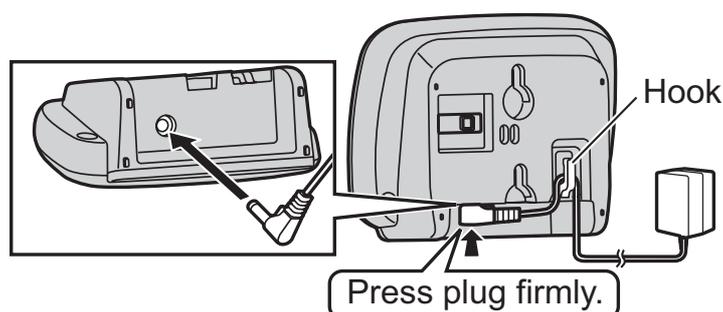
Once the unit is connected to a power outlet in step 3, it automatically goes into registration mode (if not already registered).

Important:

- Before registering the DECT repeater to the base unit, you must turn the repeater mode on. Refer to the User Guide of the base unit for details.
- If the DECT repeater is already registered before, deregister the unit at first, then re-register (page 14).

1 DECT repeater: Connect the AC adaptor.

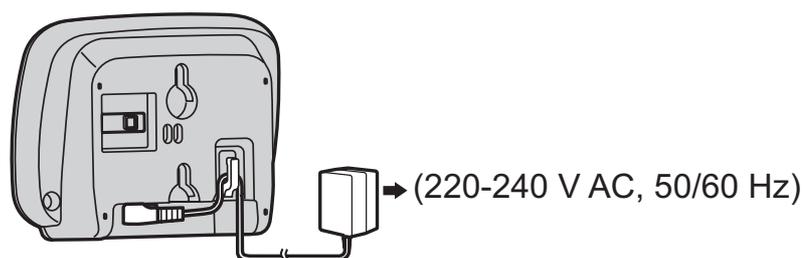
- Use only the supplied Panasonic AC adaptor PQLV219.



2 Base unit: Press and hold [📶] or [ALL] for about 4 seconds until the □ indicator or STATUS indicator flashes red.

- The button and indicator depend on the base unit.
- Depending on the base unit, a registration tone sounds.
- If all registered handsets start ringing, press the same button to stop. Then repeat this step.
- The next step must be completed within 90 seconds.

3 DECT repeater: Connect the AC adaptor to a power outlet.



- When the unit is turned on, the ⓘ indicator and ⚡ indicator light amber for about 2 seconds.

4 DECT repeater: Wait until the ⓘ indicator and ⚡ indicator light green. (The unit is ready for use.)

- If the indicators do not light green, re-position the unit in a place where the indicators light green.

5 Base unit: To exit registration mode, press [📶] or [ALL].

- The button depends on the base unit.

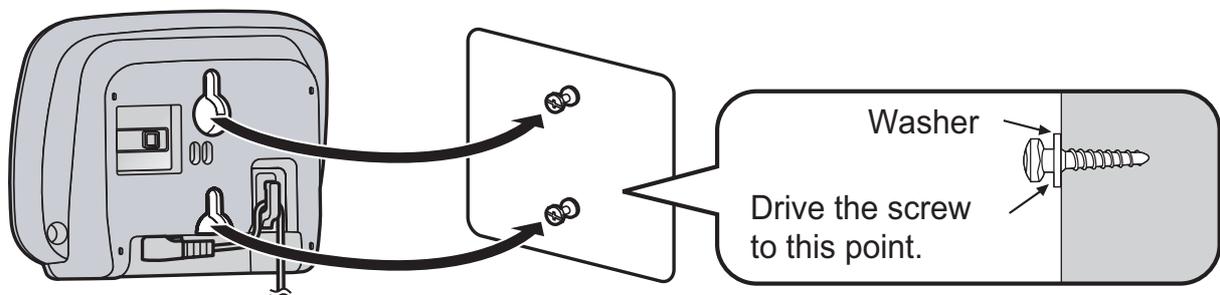
Note:

- 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.
- The unit can support a maximum of 2 calls including intercom calls at a time.
- When the ⓘ indicator flashes green rapidly on this unit, a handset registered to the unit cannot make/receive a call through this unit. Neither can a handset during a conversation within the base unit range switch to the DECT repeater range.
- Do not use more than 2 DECT repeaters at a time.
- Cascade connections are not available.

Wall Mounting

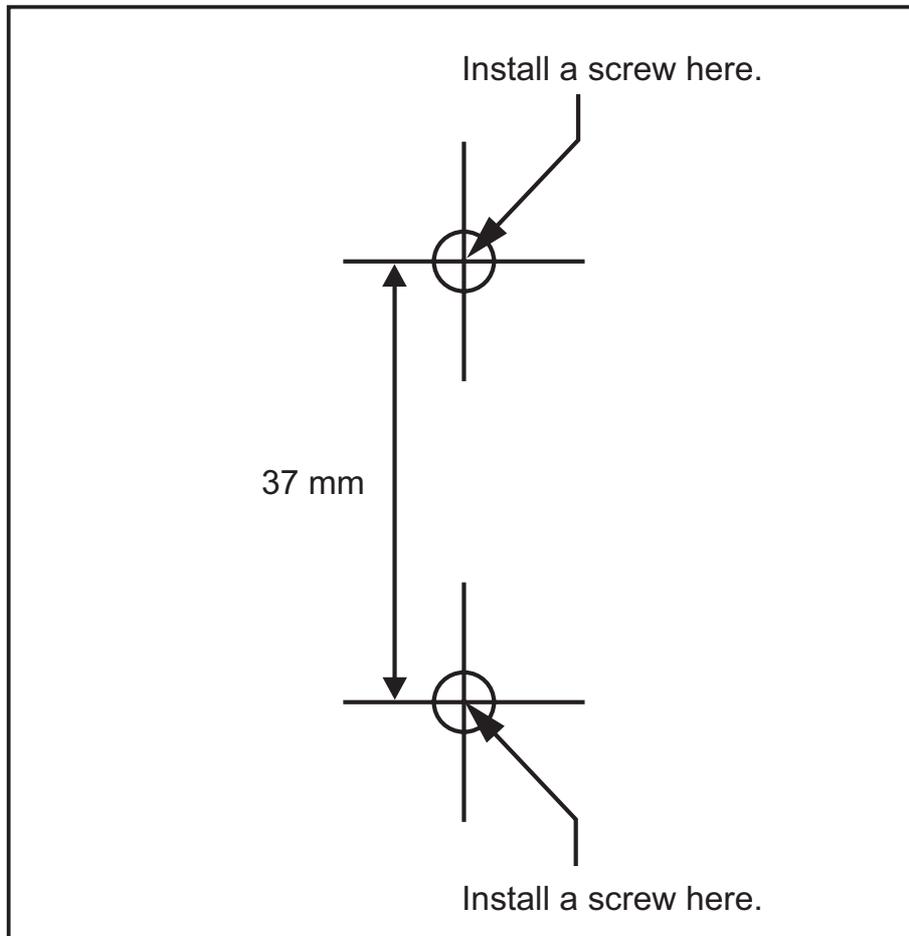
Note:

- Make sure that the wall is strong enough to support the weight of the unit.
- 1 Place the reference for wall mounting on the wall to mark the 2 screw positions.**
 - 2 Install the 2 screws and washers (included) 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 DECT repeater on the screw heads.**



Reference for Wall Mounting

Print this page and use as a reference for wall mounting.



Note:

- Make sure to set the print size to correspond with the size of this page. If the dimension of the paper output still deviates slightly from the measurement indicated here, use the measurement indicated here.

Troubleshooting

Problem	Cause/solution
The unit does not work.	<ul style="list-style-type: none"> ● When the indicators do not light, the AC adaptor is not connected properly. Check the connections. ● When the indicators do not light green, move the unit closer to the base unit. ● Registration may have been cancelled. Deregister the unit, then re-register. <p>Deregister:</p> <ol style="list-style-type: none"> 1 Unplug the AC adaptor, then press and hold [PROGRAM]. 2 While pressing and holding [PROGRAM], re-connect the AC adaptor. 3 Keep pressing and holding [PROGRAM] for about 10 seconds until the ⓘ indicator stops flashing and lights red. Then release [PROGRAM]. <ul style="list-style-type: none"> ● The ⓘ and ⚡ indicators light amber for about 2 seconds and the ⓘ indicator flashes red again. ● If the ⓘ indicator flashes green after releasing [PROGRAM], deregistration failed. Deregister the unit again. <p>Re-register: Unplug the AC adaptor, then perform from step 2, "Installation/Registering the DECT repeater to the base unit", page 11.</p>
While talking using the handset, sound cuts in and out.	<ul style="list-style-type: none"> ● The handset is out of range. Move the handset closer to this unit.
A repeating tone is heard while talking using the handset. or The ⓘ indicator continues to light amber and the ⚡ indicator flashes green.	<ul style="list-style-type: none"> ● [PROGRAM] was pressed. The unit is in programming mode. To exit, press [PROGRAM] again. Do not press [PROGRAM], except when deregistering the unit.

Problem	Cause/solution
<p>The DECT repeater's ⓘ indicator and ID indicator flash green and red alternately (alarm indication).</p>	<ul style="list-style-type: none"> ● The ID of the DECT repeater is the same as the ID of another DECT repeater that is registered to the same base unit. Deregister both of the units, then re-register them near the base unit. <p>Deregister:</p> <ol style="list-style-type: none"> 1 Unplug the AC adaptor, then press and hold [PROGRAM]. 2 While pressing and holding [PROGRAM], re-connect the AC adaptor. 3 Keep pressing and holding [PROGRAM] for about 10 seconds until the ⓘ indicator stops flashing and lights red. Then release [PROGRAM]. <ul style="list-style-type: none"> ● The ⓘ and ⚡ indicators light amber for about 2 seconds and the ⓘ indicator flashes red again. ● If the ⓘ indicator flashes green after releasing [PROGRAM], deregistration failed. Deregister the unit again. <p>Re-register: Unplug the AC adaptor, then perform from step 2, "Installation/Registering the DECT repeater to the base unit", page 11.</p>
<p>The handset registered to the unit cannot make/receive a call.</p>	<ul style="list-style-type: none"> ● When the ⓘ indicator flashes green rapidly, a handset registered to the unit cannot make/receive a call through this unit. Close to the base unit or wait until the ⓘ indicator flashes slowly or the ⓘ indicator is on.

Specifications

- **Standard:** DECT (Digital Enhanced Cordless Telecommunications)
- **Frequency range:** 1.88 GHz to 1.90 GHz
- **RF transmission power:** Approx. 10 mW (average power per channel)
- **Power source:** 220-240 V AC, 50/60 Hz
- **Power consumption:** Standby: Approx. 0.8 W, Maximum: Approx. 1.6 W
- **Operating conditions:** 0 °C – 40 °C, 20 % – 80 % relative air humidity (dry)

Note:

- Design and specifications are subject to change without notice.
- The illustrations in these instructions may vary slightly from the actual product.

CE0470

Panasonic System Networks Co., Ltd. declares that this equipment is in compliance with the essential requirements and other relevant provisions of Radio & Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC. Declarations of Conformity for the relevant Panasonic products described in this manual are available for download by visiting:

<http://www.doc.panasonic.de>

Contact to Authorised Representative:
Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, Germany

Panasonic System Networks Co., Ltd.
1-62, 4-chome, Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Web Site: <http://www.panasonic.net/>

© Panasonic System Networks Co., Ltd. 2011