Panasonic®

Operating Instructions for 5.8 GHz Expandable Digital Cordless Camera

Model No. **KX-TGA573**

Indoor Use Only



Cordless camera KX-TGA573

Camera monitoring requires a color display handset (KX-TGA571).

Please read these Operating Instructions before using the unit and save for future reference.

For assistance, visit our website:

http://www.panasonic.com/help for customers in the U.S.A. or Puerto Rico.

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Feature highlight

Camera monitoring using the color display handset

Important:

- This unit is compatible only with the 5.8 GHz expandable digital cordless handset KX-TGA571 (color display type).
- In these operating instructions, the term "handset" is used to refer to the color display handset (KX-TGA571).

You can monitor the room where the cordless camera is located when:

- you access the cordless camera using the handset (page 11).
- the cordless camera pages the handset when it detects sound (page 12).
- the cordless camera user pages the handset using the call button (page 13).

Important safety instructions

When using the product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

- 1. Read and understand all instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. After cleaning away the dust on the lens, wipe the lens with a cotton bud.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
- Protect the AC adaptor cord from being walked on or pinched particularly at plugs, receptacles, and the point where they exit from the unit.
- 8. Do not touch the unit or the AC adaptor during lightning storms.
- 9. Unplug the unit when unused for long periods of time.
- 10. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as the AC adaptor cord or plug is damaged, the unit does not operate normally, or has been dropped.

SAVE THESE INSTRUCTIONS

CAUTION:

Installation

• Do not touch the plug with wet hands.

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

WARNING:

- To prevent the risk of fire or electrical shock, do not expose the product to rain or any type of moisture.
- 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 the Panasonic Call Center at 1-800-211-PANA (1-800-211-7262).
- 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.
- 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.

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 5.76 GHz to 5.84 GHz, and the power output is 200 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.

For best performance

Avoiding noise

This unit communicates using radio waves.

For maximum distance and noise-free operation, we recommend placing the product away from electrical appliances.

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.
- The product should be kept away from heat sources such as heaters, kitchen stoves, etc. It should not be placed in rooms where the temperature is less than 5 °C (41 °F) or greater than 40 °C (104 °F). Damp basements should also be avoided.
- Operating the product near electrical appliances may cause interference.

Move away from the electrical appliances.

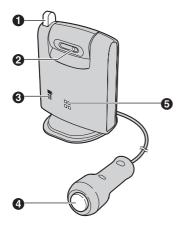
Routine care

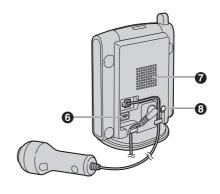
 Wipe the outer surface of the product with a soft moist cloth. Do not use benzine, thinner, or any abrasive powder.

Conditions for using the cordless camera

- The cordless camera is intended for indoor use only. Prolonged exposure to direct sunlight or halogen light may damage the camera lens.
- Use the cordless camera in a bright place such as under daylight or a well-lit room.
- Do not use the cordless camera in the following places:
 - near incandescent lamps.
 - near any electrical appliance that emits a strong radio signal.
 - where the subject of the picture is against a light source or in front of a mirror.
 - in places where temperature varies greatly, such as near an air conditioner or heater.
 - any place exposed to oil or steam such as a kitchen.
 - where an object such as glass can cause temperature change due to reflection.
- When using the cordless camera, please take into consideration the rights of others with regard to privacy.

Controls





- Antenna
- 2 Camera lens
- **3** MIC (Microphone)
- (Call button)

- 6 Indicator
- 6 DIP switches
- Speaker
- **3** PROG. (Program)

Understanding the cordless camera indicator

The cordless camera indicator shows the status as follows.

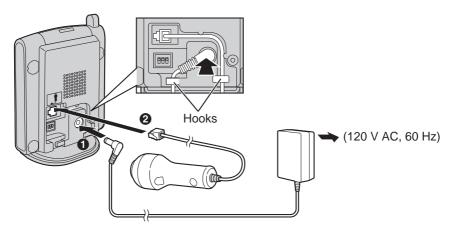
Status	Description
Red (flashing rapidly)	 The cordless camera is not registered. Register the cordless camera (page 15).
	The cordless camera is out of range. Locate the cordless camera near the base unit.
Yellow-green	The cordless camera is registered and in standby mode.
Yellow-green (flashing)	The camera sensor is responding and the cordless camera is paging the handset.
	 The cordless camera is connected and sending live images to the handset.

Setting up the cordless camera

Connecting the AC adaptor and the call button

Connect the AC adaptor cord by pressing the plug firmly (1). Connect the call button cord until it clicks into the unit (2).

• Use only the included Panasonic AC adaptor PQLV235.



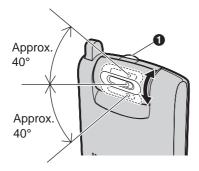
Note:

- 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.

Adjusting the cordless camera lens angle

Aim the camera lens by pushing the tab (1) and rotating the lens forward or backward.

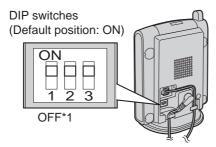
• Using the handset, confirm that the area you want to monitor from the cordless camera is displayed (page 11).



Note:

• Do not touch the camera lens (page 6).

Setting the DIP switches



You can set the following functions by using the DIP switch 1 to 3. Slide each switch with a pointed object such as a pen as necessary.

After repositioning the DIP switches to your preferred settings, unplug the AC adaptor then reconnect it. The cordless camera is reset to these settings.

DIP switch	Function	ON (default)	OFF ^{*1}
1	Image orientation	Standard	Upside down
2	Image quality	Standard quality mode	Enhanced motion mode
3	Speaker volume	Standard	Low

^{*1} Slide the switch to down.

Displaying the image upside down (DIP switch 1)

To turn the camera image upside down, set to OFF. This feature is useful when you mount the cordless camera upside down (page 17).

Selecting image quality (standard quality mode/enhanced motion mode) (DIP switch 2)

If you want enhanced motion, set to OFF (Enhanced motion mode). The image clarity decreases.

If you want to improve the image clarity, leave at ON (Standard quality mode). The motion becomes less enhanced.

Selecting the cordless camera speaker volume (DIP switch 3)

If you want to lower the speaker volume, set to OFF (LOW).

Symbols used in these operating instructions

Symbol	Meaning
[]: button name/soft key name	The words in the brackets indicate button names/
Example:	soft key names on the handset and base unit.
Unit keys: [INTERCOM], [OFF] Soft keys: [CALL]	
Example:	
	_
1 [INTERCOM]	1 Press (INTERCOM).
2 Select the desired cordless camera. → [CALL]	2 Push the joystick up or down to select the desired cordless camera, then press [CALL].
3 [MUTE]	3 Press (MUTE).
4 [OFF]	4 Press (OFF).
[A][V]	Push the joystick up or down.

Camera monitoring using a handset





With a color display handset (KX-TGA571), you can monitor the image and sound of the room where the cordless camera is located. The monitored camera does not ring, allowing you to easily monitor a baby's room, for example, from different areas of the house.

Important:

- Before you start monitoring, confirm that the camera lens of the cordless camera has been adjusted to the correct angle.
- Only 1 person can access the cordless camera at a time.
- A refreshed image taken by the cordless camera is displayed every few seconds.
 The displayed image is not a moving picture. Selecting enhanced motion mode shortens the interval (page 9).
- While monitoring a cordless camera, other users cannot make an intercom call or transfer a call.
- The monitoring connection is automatically canceled after 10 minutes.
- While monitoring you cannot place the handset on the base unit or charger. The monitoring connection will be canceled.

- The cordless camera may not page handsets in the following conditions:
 - when other users are on an intercom or conference call.
 - when electrical interference is emitted from electrical devices.
 - while you are on a call with the handset. (In this case you will hear 2 tones and will flash on the handset.)

Monitoring the cordless camera from a handset

Handset

- 1 [INTERCOM]
- 2 Select the desired cordless camera. → [CALL]
- Speak to the cordless camera user if necessary.
 OR
 To mute your sound output, press
 - [MUTE] if necessary.
- 4 When you finish monitoring, press [OFF] or place the handset on the base unit or charger.

Adjusting receiver/speaker volume Push (▲) or (▼) while monitoring.

Talking to the paged party using the cordless camera

When the cordless camera is paged from a handset, the cordless camera does not ring and the speakerphone is turned on. You can talk to the handset user. Speak clearly into the MIC.

Handset display item for camera monitoring

Displayed item	Meaning
Example:	The handset is connected to the cordless camera. When flashing: The cordless camera is paging the handset. (It detects sound or its [Call button] is pressed.)

Paging the handsets from the cordless camera

The cordless camera can page color display handsets (KX-TGA571) when it detects sound or by pressing its [Call button]. Then the answering handset user can monitor live images from the cordless camera.

Important:

- Only registered color display handsets (KX-TGA571) can be paged from the cordless camera. The base unit and monochrome display handsets (KX-TGA570) cannot be paged.
- If a handset is paged by the cordless camera during a call, 2 tones sound and
 flashes on the handset. To monitor the cordless camera from the handset, press (OFF), then press (♣).
- Auto intercom feature cannot be used when paged by a cordless camera.

Paging using the cordless camera audio sensor

Important:

 You can adjust the audio detection sensitivity (page 14).

1 Cordless camera:

The cordless camera detects sound.

 The cordless camera produces a camera tone and pages the handsets for 1 minute.

2 Handset:

Press [♣] to answer the page.

 You can monitor the room where the cordless camera is located.

3 Handset:

To mute your sound output, press [MUTE] if necessary.

4 Handset:

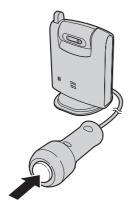
When you finish monitoring, press **[OFF]** or place the handset on the base unit or charger.

Paging using the cordless camera call button

1 Cordless camera:

Press [Call button].

 The cordless camera produces a camera tone and pages the handsets for 1 minute.



2 Handset:

Press (♣) to answer the page.

 You can monitor the room where the cordless camera is located.

3 Cordless camera:

When the handset user answers, speak clearly into the MIC.

4 Handset:

When you finish monitoring, press **[OFF]** or place the handset on the base unit or charger.

Useful settings while camera monitoring

With a color display handset (KX-TGA571), you can set the camera settings while monitoring.

Important:

 Each time you press [OPTION], the right soft key switches between [BRIGHT], [ZOOM], and [SENSOR].

Adjusting the display brightness There are 6 levels.

There are o levels.

- **1** Start monitoring (page 11).
- 2 Press [OPTION] repeatedly until [BRIGHT] is displayed.
- **3** Press **[BRIGHT]** repeatedly to adjust the brightness.

Note:

 When you finish monitoring, the setting is reset to the default.

Selecting image zoom

- **1** Start monitoring (page 11).
- 2 Press (OPTION) repeatedly until (ZOOM) is displayed.
- **3** Press **[ZOOM]** to zoom in on the image.
 - To return to the original view, press (ZOOM) again.

Camera Monitoring

Setting the audio detection sensitivity

The cordless camera features a sensor that detects human voices such as a baby cry. Sounds other than human voices may be difficult to detect. To use this feature, confirm that the cordless camera is located in a place where it can easily detect voices. Once the sensor has detected sound, the cordless camera pages the handset.

To use the audio detection feature of the cordless camera, turn the audio detection sensitivity to on.

There are 3 levels. The default setting is "off".

- **1** Start monitoring (page 11).
- 2 Press [OPTION] repeatedly until [SENSOR] is displayed.

3 [SENSOR]

- **4** To turn the feature on, push [▲]. Push [▲] or [▼] to select the desired sensitivity.
 - To turn this feature off, push [▼] repeatedly.

5 [SAVE]

Note:

- When you turn this feature off, the cordless camera cannot detect sound (page 12).
- To set the appropriate level, test the sensor of the camera from the handset beforehand

Registering the cordless camera

The included cordless camera and base unit are preregistered. If for some reason the cordless camera is not registered to the base unit, register the cordless camera.

1 Base unit:

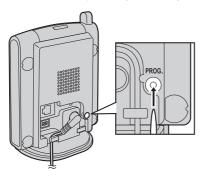
Press and hold **[INTERCOM]** until the IN USE indicator flashes.

 After the IN USE indicator starts flashing, the rest of the procedure must be completed within 90 seconds.

2 Cordless camera:

Press PROG. (program) on the back side of the cordless camera with a pointed object such as a pen until a short beep starts to sound.

 When registration is completed successfully, a long beep sounds and the indicator stops flashing red but remains lit in yellow-green (page 6).



Deregistering the cordless camera

The base unit can cancel the registration of a registered cordless camera.

Important:

 Before deregistering, confirm the cordless camera's extension number from the handset (color display models only: KX-TGA571).

Press **(INTERCOM)** on the handset to display its extension.

Base unit

- 1 Press and hold [INTERCOM] until the IN USE indicator flashes.
- 2 Press and hold the cordless camera's extension number ([1] [8]) until a beep sounds.

Note:

• The indicator color on the camera remains the same

Wall mounting

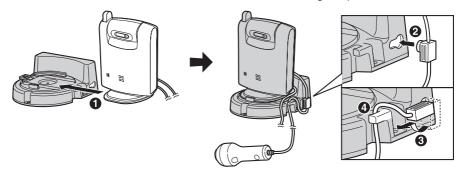
The cordless camera can be mounted by the standard mounting or upside down mounting.

CAUTION:

- Mount the cordless camera on the stable location where the unit can be adequately supported when installing.
- 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.
- Do not mount the cordless camera on a soft material. It may fall down, break or cause injury.
- Do not mount the cordless camera on the following places: plaster board, ALC (autoclaved lightweight cellular concrete), concrete block, plywood less than 25 mm (1 inch) thick, and etc.
- Do not pull the call button wire after you mount the cordless camera on the wall.
- After mounting the cordless camera on the wall, speak loudly and clearly into the MIC when talking with the handset user.

Connecting the wall-mounting adaptor

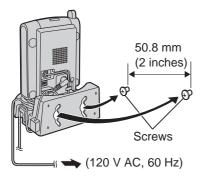
- Slide the cordless camera into the wall-mounting adaptor in the direction of the arrow until it clicks into the place.
- 2 Tuck the call button wire into the hole on the side of the wall-mounting adaptor by plugging the small wire fixture into the hole.
- **3** Turning it slightly and sliding it in place.
- Fasten the call button wire to the hook of the wall-mounting adaptor.



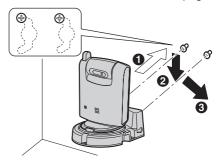
Mounting the cordless camera on the wall

Standard mounting

1 Drive the screws (not included) into the wall at a recommended height of 1.8 m (5.9 feet) or below using the wall mount template as a guide (page 18).

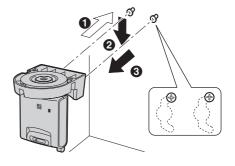


- 2 Mount the cordless camera (1), then slide it down (2) and to the right (3) until it is secure.
 - To aim the camera lens, see page 8.



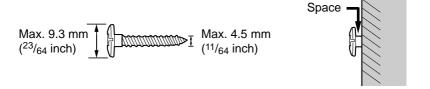
Upside down mounting

- The image may be seen upside down when mounting upside down. To compensate for this, change the cordless camera setting to display images upside down (page 9).
- 1 Drive the screws (not included) into the wall at a recommended height of 1.8 m (5.9 feet) or below using the wall mount template as a guide (page 18).
 - 50.8 mm
 (2 inches)
 Screws
 (120 V AC, 60 Hz)
- 2 Mount the cordless camera (1), then slide it down (2) and to the left (3) until it is secure.



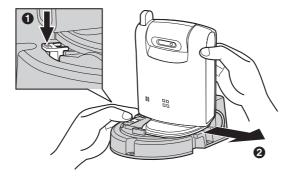
About the screws for wall mounting

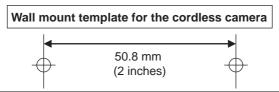
- Use the recommended screw size below.
- Drive the mounting screws leaving enough length from the wall to hook the cordless camera.



Removing the wall-mounting adaptor

Press and hold the hold button (1) on the left side of the wall-mounting plate. Slide the cordless camera to the right (2).





Troubleshooting

Problem	Cause & solution
The cordless camera does not work.	 Check the connections (page 7). The cordless camera is not registered to the base unit. Register the cordless camera to the base unit (page 15).
The cordless camera's indicator is flashing red.	 The cordless camera is not registered to the base unit. Register the cordless camera to the base unit (page 15). The cordless camera is out of range. Locate the cordless camera near the base unit.
The image is faint.	 The camera lens is dirty. Clean it with a soft dry cloth. Do not touch the lens directly. Fingerprint may cause an unclear image.
The image sent from the cordless camera is poor on the handset display.	 Adjust the display brightness setting (page 13). Select standard quality mode instead of enhanced motion mode (page 9). The place where the cordless camera is located is dark. Improve lighting.
The image sent from the cordless camera is dark and difficult to see on the handset display.	 Adjust the display brightness setting (page 13). There is a strong sunlight or a backlight in the place where the cordless camera is located. Try shading the camera's location.
I cannot connect to the cordless camera, the image distorts, or the image is slow.	 The cordless camera has lost communications with the base unit. Move the cordless camera closer to the base unit, and try again. There is an obstacle such as concrete wall. Move the cordless camera to the place without an obstacle. A microwave appliance is in use. Move the cordless camera closer to the base unit or use the cordless camera away from that appliance, and try again.
The camera sensor does not respond.	 If you set the audio detection sensitivity to off, the camera sensor does not respond. Turn this feature on (page 14). While a handset is monitoring the cordless camera, the cordless camera stops detecting sound.

Useful Information

Problem	Cause & solution
I pressed [Call button] but the cordless camera does not page the handsets.	 While the image of the cordless camera is being monitored by a handset, [Call button] will not have response.
The handset speaker and/or the cordless camera emit a howling noise while monitoring.	Move the handset away from the cordless camera.
When using the handset speakerphone to have an intercom call with the cordless camera, sound cuts in and out and you have difficulty hearing the other party.	● Lower the speaker volume by pushing 【▼】.

FCC and other information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

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.

FCC RF Exposure Warning:

The product complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF exposure requirements, the product must be installed and operated with its antenna located 20 cm (8 inches) or more between the antenna and all person's body (excluding extremities of hands, wrist and feet). The product must not be collocated or operated in conjunction with any other antenna or transmitter.

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 5.76 GHz to 5.84 GHz, and the power output is 200 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.

Useful Information

Notice

- This product is designed for use in the United States of America. Sale or use of this product in other countries may violate local laws.
- Cet appareil est conçu pour être utilisé aux États-Unis d'Amérique. La vente ou l'emploi de cet appareil dans certains autres pays peut constituer une infraction à la législation locale.
- Este producto está diseñado para usarse en los Estados Unidos de América. La venta o el empleo de este producto en ciertos países puede constituir violación de la legislación local.
- ●本產品專為美國使用而設。若在其他 國家銷售或使用,可能會違反當地法 例。
- ●この製品は、日本国外での使用を目的 として設計されており、日本国内での 使用は法律違反となります。従って、 当社では日本国内においては原則とし て修理などのサービスは致しかねます。

Specifications

Operating environment	5 °C – 40 °C (41 °F – 104 °F)
Frequency	5.76 GHz – 5.84 GHz
Dimensions	Approx. height 124 mm x width 86 mm x depth 68 mm $(4^{7}/_{8} \text{ inches x } 3^{3}/_{8} \text{ inches x } 2^{11}/_{16} \text{ inches})$
Mass (Weight)	Approx. 150 g (0.33 lb.)
Power consumption	Standby: Approx. 1.5 W Maximum: Approx. 2.8 W
Power output	200 mW (max.)
Power supply	AC adaptor (120 V AC, 60 Hz)
Number of pixels	11,776 pixels
Illuminance	10 lux (min.)
Focus	Fixed 0.25 m (9 ²⁷ / ₃₂ inches) – Infinity
Photograph angle	Vertical angle: Approx. 35° Horizontal angle: Approx. 45°

Note:

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

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If you need assistance with setup or operation

- 1 Visit our website: http://www.panasonic.com/help
- 2 Contact us via the web at: http://www.panasonic.com/contactinfo
- **3** Call us at: 1-800-211-PANA (1-800-211-7262) TTY users (hearing or speech impaired users) can call 1-877-833-8855.

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