Thank you for purchasing a Panasonic product.

Please read this document before using the unit and save it for future reference.

For assistance, please visit our Web site:

http://shop.panasonic.com/support for customers in the U.S.A.
How do I access the User’s Guide?

The User’s Guide is a collection of online documentation that helps you get the most out of the HomeHawk app.

1. Start the [HomeHawk] app and then tap ．
2. Tap [Support].

Note:
- You can also access the User’s Guide at the web page listed below.
  https://panasonic.net/cns/pcc/support/homehawk/manual2/
- Microsoft® Windows® Internet Explorer® 8 and earlier versions are not supported.
- Design and specifications are subject to change without notice.
Part names and functions

**Room side**

- **microSD card slot**
- **SETUP button**
- **RESET button**
- **LOCK lever** Used to lock/unlock the suction cup.
- **LOCK pin** See page 7, 26
- **Removal tab** Used to help pull off the suction cup from windows.
- **LED indicator** See page 6
- **MAC address** Used during initial setup with Bluetooth.
- **Power Jack** Power connector jack

### Resetting the camera

1. Plug in the camera.
   - Wait for about 1 minute.
2. Using an object with a thin tip, press and hold **RESET** button for 10 seconds.
   - The camera’s settings are reset.
3. Wait for the camera’s LED indicator to light in yellow.
Window side

Double-sided tape (2 sets)
Used to adhere the camera to a window for a longer period than the suction cup.

Suction cup
Used to adhere the camera to a window.

Slot brackets
Place to attach the double-sided tape.

Lens

Cover

AC adaptor
1 pcs

Cable clips
2 clips
### LED indicator Status

<table>
<thead>
<tr>
<th>LED indicator</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>• No power</td>
</tr>
<tr>
<td></td>
<td>• LED indicator is turned off*1</td>
</tr>
<tr>
<td>Yellow lit</td>
<td>Not registered to your wireless router (usually for initial setup) or signal level is good*2</td>
</tr>
<tr>
<td>blinking slowly</td>
<td>Initial setup is being performed using WPS on your router</td>
</tr>
<tr>
<td>Green lit</td>
<td>• Registration successfully completed*3</td>
</tr>
<tr>
<td></td>
<td>• Signal level is strong*2</td>
</tr>
<tr>
<td>blinking slowly</td>
<td>Registration mode or updating</td>
</tr>
<tr>
<td>blinking quickly</td>
<td>Camera is searching for your wireless router</td>
</tr>
<tr>
<td>Blue lit</td>
<td>Connected to the wireless router and camera is on</td>
</tr>
<tr>
<td>Red lit</td>
<td>• Registration failed*3</td>
</tr>
<tr>
<td></td>
<td>• Accessing microSD card (when using 24/7 recording)</td>
</tr>
<tr>
<td></td>
<td>• Signal level is weak*2</td>
</tr>
<tr>
<td>blinking</td>
<td>• Camera is out of range of your wireless router*2</td>
</tr>
<tr>
<td></td>
<td>• Wireless LAN connection failed</td>
</tr>
<tr>
<td></td>
<td>• Device error (fan error)*4</td>
</tr>
<tr>
<td>blinking slowly</td>
<td>• Streaming data<em>1 or detecting motion</em>1</td>
</tr>
<tr>
<td></td>
<td>• Accessing microSD card (when not using 24/7 recording)</td>
</tr>
</tbody>
</table>

*1 You can configure the camera so that its LED indicator does not light during normal operation from the camera settings of the app. For more information, access the User’s Guide (page 3).

*2 The signal level (strong, good, weak, out of range) is shown for 3 seconds after pressing SETUP button.

*3 Lights for 3 seconds after registration is successfully completed or failed.

*4 Unplug the camera and then plug it in again. If the message is still displayed, contact an authorized service center.
Replacement accessories

<table>
<thead>
<tr>
<th>Accessory item</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC adaptor</td>
<td>PNLV251-1Z</td>
</tr>
<tr>
<td>Double-sided tape</td>
<td>PNHS1987Z</td>
</tr>
<tr>
<td>Cable clip</td>
<td>PNZSAHNC500W</td>
</tr>
<tr>
<td>Suction cup</td>
<td>PNYSAHNC500W</td>
</tr>
<tr>
<td>LOCK pin</td>
<td>PNDF1275Z</td>
</tr>
</tbody>
</table>

Installation alignment

Installation location cautions

• The camera may not be able to be installed to areas on the glass of windows that are uneven or have film, etc. attached.
• Depending on the installation location, the camera may hit against objects or people when the window is opened or closed.
About this system
• This system is not designed to provide complete protection from property loss. To the maximum extent permitted by applicable law, Panasonic will not be held responsible for any damage incurred as a result of property loss.
• The system’s wireless features are subject to interference, therefore functionality in all situations cannot be guaranteed. Panasonic will not be held responsible for injury or damage to property that occurs in the event of wireless communication error or failure.

Privacy and rights of portrait
Please take into consideration the rights of others’ privacy. Generally said that “privacy” means the ability of an individual or group to stop information about themselves from becoming known to others. “Rights of portrait” means the right to be safe from having your own image taken and used indiscriminately without consent.

Security cautions
• Take appropriate measures to avoid the following security breaches when using this product.
  – Leaks of private information
  – Unauthorized use of this product
  – Unauthorized interference or suspension of the use of this product
• Configure the wireless router that connects your mobile device to this product to use encryption for all wireless communication.
• Do not use the default password continuously. Change it to your own setting and set new one periodically. Do not use passwords that could be easily guessed by a third party. If you keep a record of your passwords, protect that record.
• If you lose your mobile device, change the password used to access this product.
• If you enable the product’s auto login feature, enable the screen lock or similar security feature on your mobile device.
• Performing the reset will delete all information. To avoid losing your previous setting, we recommend to write down the information.
• To prevent disclosure of personal information, enable the screen lock or similar security feature on your mobile device.
• When submitting the product for repair, make a note of any important information stored in the product, as this information may be erased or changed as part of the repair process.
• Use only trusted repair services authorized by Panasonic.
• Before disposing of the product, perform a factory data reset to erase any data stored in the product. Remove and erase the microSD card.
• If your mobile device will no longer be used with the product, delete your mobile device’s.
registration from the product and delete the corresponding app from your mobile device.

- This product may be used in ways that violate the privacy or publicity rights of others. You are responsible for the ways in which this product is used.

**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**

**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 us at [http://shop.panasonic.com/support](http://shop.panasonic.com/support)
- Unplug from power outlets and never touch the inside of the product if its casing has been broken open. Danger of electric shock exists.
- Never touch the plug with wet hands. Danger of electric shock exists.
- Do not connect non-specified devices.

**Operating safeguards**
- Unplug the product from power outlets before cleaning. Do not use liquid or aerosol cleaners.
- Do not disassemble the product.
- Never put metal objects inside the product. If metal objects enter the product, turn off the circuit breaker and contact an authorized service center.
- Keep small parts, such as microSD cards, out of the reach of children. There is a risk of swallowing.
- The applied nameplate is located at the bottom or rear of 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. Wireless LAN features operate between the frequencies listed below, with a peak transmission power of 100mw:
2.412 GHz – 2.462 GHz
5.180 GHz – 5.320 GHz
5.500 GHz – 5.720 GHz
5.745 GHz – 5.825 GHz

- Do not use the product in Healthcare facilities if any regulations posted in the area instruct you not to do so. Hospitals or Healthcare facilities may be using equipment that could be sensitive to external RF energy.

**CAUTION**

**Installation and location**
- Never install wiring during a lightning storm.
- The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is installed near the product and is easily accessible.
- Mount the product on a stable location. Failure to do so may cause the product to fall resulting in damage to the product or injury.
- Do not mount the product on cracked or unstable windows. This may damage the windows.
- This product is a precision product and may be damaged if it falls.
- To prevent the product from being damaged, make sure to carefully read the Quick Start Guide and this document.
- When attaching the product using the suction cup, make sure to periodically reattach the product.
- Avoid using the suction cup and double-sided tape for long periods. Periodically replace them with new parts.

**For best performance**

**Product location/avoiding noise**
- This product uses radio waves to communicate with a wireless router.
- For maximum coverage and noise-free communications, place this product:
  - at a convenient, high, and central location with no obstructions between this product and the wireless router.
  - 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.
- Coverage and transmission quality depends on the local environmental conditions.
- If the transmission quality is not satisfactory, move this product to another location.

**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.
- Do not expose this product to direct sunlight or
other forms of powerful light such as halogen lights for long periods of time. (This may damage the image sensor.)

- 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 heaters, kitchen stoves, etc. It should not be placed in rooms where the temperature is less than 0 °C (32 °F) or greater than 40 °C (104 °F). Damp basements should also be avoided.
- The maximum communication range 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 wet wipe.
- Do not use benzine, thinner, or any abrasive powder.

Camera image quality
- Camera image and its quality may be affected on the mobile device based on surroundings such as lighting, brightness.
- Dirty windows and window screens affect the camera image quality. Regularly clean the windows and remove the window screens.
- Rain directly falling on a window may affect the camera image quality and human detection performance. We recommend installing the product on window that is not exposed to direct rain, such as a window with a sunshade.

Protecting your recordings
- Do not remove the microSD card or disconnect the product’s AC adaptor while reading or writing data to the microSD card. Data on the card could become corrupted.
- If a microSD card malfunctions or is exposed to electromagnetic waves or static electricity, data on the card could become corrupted or erased. Therefore we recommend backing up important data to a computer or other device.

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 from the memory before you dispose of, transfer, or return the product.
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。

FCC and other information

FCC
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. Privacy of communications may not be ensured when using this device.

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.

Some devices operate at frequencies that may
cause interference to nearby TVs and VCRs. To minimize or prevent such interference, this device should not be placed near or on top of a TV or VCR. If interference is experienced, move this device further away from the TV or VCR. This will often reduce or eliminate interference.

FCC RF Exposure Warning:
- This product complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- To comply with FCC RF exposure requirements, the device must be installed and operated 20 cm (8 inches) or more between the product and all person’s body.
- This product may not be collocated or operated in conjunction with any other antenna or transmitter.

Notice:
- FCC ID can be found behind the cover of the unit.

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 power cord indicated in this document.

SAVE THESE INSTRUCTIONS

Graphical symbols for use on equipment and their descriptions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚫️</td>
<td>Alternating current (A.C.)</td>
</tr>
<tr>
<td>⚫️</td>
<td>Direct current (D.C.)</td>
</tr>
<tr>
<td>🏡</td>
<td>For indoor use only</td>
</tr>
<tr>
<td>📜</td>
<td>Class II equipment (equipment in which protection against electric shock relies on Double Insulation or Reinforced Insulation)</td>
</tr>
<tr>
<td>⚠️</td>
<td>Caution: risk caused by visible radiation</td>
</tr>
</tbody>
</table>

Open source software notice
Parts of this product use open source software supplied based on the relevant conditions of the Free Software Foundation's GPL and/or LGPL and other conditions. Please read all licence information and copyright notices related to the open source software used by this product. This information is
available at the following web page:
https://panasonic.net/cns/pcc/support/homehawk
At least three (3) years from delivery of this product, Panasonic Corporation will give to any third party who contacts us at the contact information provided below, for a charge of no more than the cost of physically distributing source code, a complete machine-readable copy of the corresponding source code and the copyright notices covered under the GPL and the LGPL. Please note that software licensed under the GPL and the LGPL is not under warranty.
https://panasonic.net/cns/pcc/support/homehawk

Software information
The End User License Agreement (EULA) for the HomeHawk app is available at the following web page:
https://panasonic.net/cns/pcc/support/homehawk

Notice for AVC patent portfolio license
THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD (“AVC VIDEO”) AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM

Trademarks
• microSDXC Logo is a trademarks of SD-3C, LLC.

• Apple, the Apple logo, iPhone, and iPad Air are registered trademarks of Apple Inc. App Store is a service mark of Apple Inc.

• Android and Google Play are registered trademarks or trademarks of Google LLC.

• Microsoft, Windows, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

• Wi-Fi®, WPA™, and WPA2™ are registered trademarks or trademarks of Wi-Fi Alliance®.

• The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Panasonic Corporation is under license.

• All other trademarks identified herein are the property of their respective owners.
Specifications

Standards: IEEE 802.11a/b/g/n

Wireless LAN:
Frequency range: 2.412 GHz – 2.462 GHz (channels 1 – 11) / 5.180 GHz – 5.320 GHz (channels 36–64) / 5.500 GHz – 5.720 GHz (channels 100–144) / 5.745 GHz – 5.825 GHz (channels 149–165)
RF transmission power: 100 mW (peak transmission power)
Encryption: WPA2™-PSK (TKIP/AES), WPA™-PSK (TKIP/AES), WEP (128/64 bit)

Wi-Fi device type: DFS client device

Power source: 120 V AC, 60 Hz

Bluetooth:
Bluetooth system specification: Ver. 5.0
Wireless equipment classification: Class 1.5
Frequency range: 2.402 GHz – 2.48 GHz
RF transmission power: +10 dBm (max)

Power consumption: Standby: 3.0 W / Maximum: 4.1 W

Operating conditions: 0 °C – 40 °C*1 (32 °F – 104 °F) / 20 % – 80 % relative air humidity (dry)

Resolution: 1920 x 1080 pixel (Full HD), 1280 x 720 pixel (HD), 640 x 480 pixel (VGA)

Image sensor: 2.1 megapixel CMOS

Minimum illuminance required: 0.20 lx*2

Focal length: Fixed (1.5 m (4 feet 11 inches) – infinity)

Camera field of view: Diagonal 150°

microSD card*3, *4:
Type: microSDHC card (4 GB – 32 GB), microSDXC card (64 GB – 1 TB)
Speed: Class10, or UHS Speed Class 1 or higher

Motion detection method: Visual sensor

Dimensions (height × width × depth): Approx. 73 mm × 130 mm × 32 mm (2 7/8 inches × 5 1/8 inches × 1 17/64 inches)

Mass (weight): Approx. 135 g (0.29 lb)

*1 A fan operates when the camera becomes hot. The fan may be audible when it is operating.

*2 Illuminance to detect the form of people when people are within approx. 4.8 m (16 feet) of the camera and there is sufficient contrast with the background.

*3 We strongly recommend using a microSD card that is an “MLC flash memory” type or states its use for “video monitoring cameras” or “dash cam and home monitoring systems”.

*4 When recording images, images are not recorded in the following situations.
  • When using 24/7 recording, images are not recorded for about 1 second between the 5-minute recording intervals.
  • When switching to HDR recording, images are not recorded for about the first 5 seconds.
# Troubleshooting (Initial setup by selecting “Bluetooth”)

<table>
<thead>
<tr>
<th>Problem</th>
<th>LED color</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>When initial setup is performed using Bluetooth, the following screen is displayed and the setup cannot be completed.</td>
<td>Blue</td>
<td>If the LED indicator is blinking in red, unplug the camera and then plug it in again, check the following causes and solutions, and then try again from the beginning.</td>
<td>• Enter the correct password for the wireless network.&lt;br&gt;• Unplug the camera and then plug it in again, and then try again from the beginning.</td>
</tr>
<tr>
<td>The camera’s LED indicator is blinking in red.</td>
<td></td>
<td>The wireless network password may be incorrect.</td>
<td>• Confirm that the wireless router’s DHCP settings are enabled. Refer to your wireless router’s manual.</td>
</tr>
<tr>
<td>A network clash has occurred because you have 2 wireless routers at home that are using the same channel or channels of a close frequency.</td>
<td>Blue</td>
<td>The address filter function of your wireless router may be enabled.</td>
<td>• Register the MAC address (page 4) of the camera to the address filter setting of the wireless router. Refer to your wireless router’s manual.</td>
</tr>
<tr>
<td>The camera’s LED indicator is lit in blue.</td>
<td></td>
<td>A network clash has occurred because you have 2 wireless routers at home that are using the same channel or channels of a close frequency.</td>
<td>• Unplug all the wireless routers and plug them in again.&lt;br&gt;If the situation still does not improve, refer to your wireless router’s manual for information on how to change the router channel of your wireless network.</td>
</tr>
<tr>
<td>Problem</td>
<td>LED color</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>When initial setup is performed using Bluetooth, the following screen is displayed and the setup cannot be completed.</td>
<td>The camera’s LED indicator is lit in blue.</td>
<td>The “Isolation” function on the wireless router is enabled.</td>
<td>• Sometimes when the “Isolation” function is enabled, the camera will not be able to communicate to your mobile device via the wireless router. Disable the “Isolation” function on your wireless router. For details refer to your wireless router’s manual.</td>
</tr>
</tbody>
</table>
Troubleshooting (Initial setup by selecting “WPS”)

What is WPS?

WPS is a function of wireless routers that is used to easily connect wireless devices to wireless routers. A WPS button on a wireless router indicates that it has the WPS function. (Depending on the type of wireless router, the WPS function may be disabled on the wireless router even if there is a WPS button.)

If you have trouble during the initial setup, check the following causes/solutions first.

<table>
<thead>
<tr>
<th>Problem</th>
<th>LED color</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>When initial setup is performed using WPS, the following screen is displayed and the setup cannot be completed.</td>
<td>The camera’s LED indicator is blinking in red.</td>
<td>If the LED indicator is blinking in red, unplug the camera and then plug it in again, check the following causes and solutions, and then try again from the beginning.</td>
<td></td>
</tr>
<tr>
<td>The WPS function on your wireless router may be disabled.</td>
<td></td>
<td>Some Internet Service Provider wireless routers may have WPS disabled. • During initial setup select “Bluetooth”.</td>
<td></td>
</tr>
<tr>
<td>The camera and wireless router are too far away.</td>
<td></td>
<td>• Move the camera and wireless router closer together.</td>
<td></td>
</tr>
<tr>
<td>The wireless router is not in WPS mode.</td>
<td></td>
<td>• Press the WPS button on the wireless router for long enough until the LED indicator on the router starts blinking.</td>
<td></td>
</tr>
<tr>
<td>Several cameras are in WPS mode.</td>
<td></td>
<td>• Only 1 camera can be operated in WPS mode at a time.</td>
<td></td>
</tr>
<tr>
<td>The DHCP function of your wireless router may be disabled.</td>
<td></td>
<td>• Confirm that the wireless router’s DHCP settings are enabled. Refer to your wireless router’s manual.</td>
<td></td>
</tr>
<tr>
<td>The address filter function of your wireless router may be enabled.</td>
<td></td>
<td>• Register the MAC address (page 5) of the camera to the address filter setting of the wireless router. Refer to your wireless router’s manual.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>LED color</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>When initial setup is performed using WPS, the following screen is displayed and the setup cannot be completed.</td>
<td>The camera’s LED indicator is lit in yellow.</td>
<td>The camera is not in WPS mode. The <strong>SETUP</strong> button was not pressed for long enough.</td>
<td>• Follow the on-screen instructions, and press and hold the <strong>SETUP</strong> button on the camera until the LED indicator starts blinking (about 5 seconds).</td>
</tr>
<tr>
<td></td>
<td>The camera’s LED indicator is lit in blue.</td>
<td>The WPS button was pressed on another router which is different from the router your mobile device is connected with.</td>
<td>• Reconnect your mobile device to the router whose WPS button was pressed, restart the [HomeHawk] app, and then follow the on-screen instructions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A network clash has occurred because you have 2 wireless routers at home that are using the same channel or channels of a close frequency.</td>
<td>• Unplug all the wireless routers and plug them in again. If the situation still does not improve, refer to your wireless router’s manual for information on how to change the router channel of your wireless network.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The “Isolation” function on the wireless router is enabled.</td>
<td>• Sometimes when the “Isolation” function is enabled, the camera will not be able to communicate with your mobile device via your wireless router. Disable the “Isolation” function on your wireless router. For details, refer to your wireless router’s manual.</td>
</tr>
</tbody>
</table>
## Troubleshooting (Connection)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The LED indicator is blinking in red.</td>
<td>The camera is out of range of your wireless router.</td>
<td>• Confirm that your wireless router is powered on and wired correctly, and then move the camera closer to your wireless router.</td>
</tr>
<tr>
<td>I cannot connect while away from home.</td>
<td>You are using a public wireless network.</td>
<td>• Network traffic, network conditions, and the network provider’s settings or policies may prevent the connection. Use your mobile network service provider’s wireless network (3G, 4G, etc.).</td>
</tr>
<tr>
<td></td>
<td>The network condition of the service area you are currently in is bad and your mobile device is having trouble communicating.</td>
<td>• Confirm the wireless network connection status of your mobile device. • Try moving to another location.</td>
</tr>
<tr>
<td></td>
<td>There is too much traffic in the wireless network or the mobile network that your camera is connected to.</td>
<td>• Wait for the network traffic to decrease, and then try to connect again.</td>
</tr>
</tbody>
</table>
Troubleshooting (Sensors)

How does the camera detect changes?
The camera has 2 sensor features: a visual sensor used for motion detection and person detection.

Note:
• The camera’s sensor features are not designed to be used in situations that require high reliability. We do not recommend use of the sensor features in these situations.
• Panasonic takes no responsibility for any injury or damage caused by the use of the camera’s sensor features.

Visual sensor to detect motion
The camera can detect motion by recognizing changes in the areas that are visible to the camera.
The camera can detect motion in the following ranges.
• Vertical detection range: 63°
• Horizontal detection range: 121°

Note:
• It may not be possible to correctly detect movement when the moving object and the background have similar colors.
• Detection may become difficult when the image is dark like evening or night.
• Detections may be triggered during rain or snow, or when there is a change of lighting or shadow (e.g., from bedroom lamps, head lights, etc.)
• You can adjust the sensitivity of the camera’s motion detection feature, and select which areas of the camera image are monitored for motion detection. For more information, access the User’s Guide (page 3).
Visual sensor to detect a person
The camera can detect people in the areas that are visible to the camera.
The camera can detect people in the following ranges.
- Vertical detection range: 63°
- Horizontal detection range: 121°

Note:
- It may not be possible to correctly detect people when their clothes and the background are a similar color.
- It may not be possible to correctly detect people when they are riding on bicycles or motorcycles.
- Detection becomes difficult when the image is dark.
- Vehicles, etc. may be mistakenly detected as people depending on their distance and direction from the camera.
- It may not be possible to correctly detect people when only parts of them are visible due to obstacles such as trees, fences, cars, poles, or raindrops or dust on the window.

Example:
Can I select areas for detection?

1. Start the [HomeHawk] app and then tap 📣.

2. Tap [Settings].

3. Tap [Camera Settings].
4 Tap [Detection] → [Set Detection Area].

5 Check the color of the areas on the screen to see where the camera’s motion detection features are triggered.

6 Adjust the detection area as necessary by enabling and disabling detection for the desired areas.

Example:

Note:
- If the visual sensor is still triggered too easily after adjusting the detection area, you can reduce the sensitivity of the visual sensor. For more information, access the User’s Guide (page 3).
Cleaning the suction cup

1. Remove the cover from the camera and then take the camera off the window.

2. Wipe the suction cup with a wet wipe.

Note:
- For additional information, refer to our Web site: https://shop.panasonic.com/HHvideo6
Replacing the suction cup

1. Remove the cover from the camera, place the camera on a flat surface, and then lift up the LOCK lever.

2. Pull out the LOCK pin from the LOCK lever using a paper clip or similar object.
3 Lift up the camera to remove the suction cup from the camera.

4 While pulling the removal tab through the opening in the camera, lower the camera onto the replacement suction cup.
5 With the LOCK lever in the unlocked position, insert the LOCK pin through the holes in the LOCK lever and the suction cup.

Note:
- For additional information, refer to our Web site: https://shop.panasonic.com/HHvideo5
Replacing double-sided tape

1 Remove the cover from the camera and then take the camera off the window.

2 Rotate the slot brackets from side to side and then pull them off the window.
   • Remove the old tape from the window or slot bracket.
3 Insert the slot brackets into the camera.

4 Attach the replacement double-sided tape.

Note:
• For additional information, refer to our Web site:
  https://shop.panasonic.com/HHvideo4
Warranty

Panasonic Products Limited Warranty

Limited Warranty Coverage (For USA Only)

If your product does not work properly because of a defect in materials or workmanship, Panasonic Corporation of North America (referred to as “the warrantor”) will, for the length of the period indicated on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor.

<table>
<thead>
<tr>
<th>Product or Part Name</th>
<th>Parts</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Network System Products</td>
<td>One (1) Year</td>
<td>One (1) Year</td>
</tr>
<tr>
<td>microSD card (Included model only)</td>
<td>90 days</td>
<td>N/A</td>
</tr>
</tbody>
</table>

IMPORTANT!

If your product is not working properly...

1. Reconnect the AC adaptor to the camera.
2. Use the HomeHawk app to access the User’s Guide and refer to the Troubleshooting section.

Visit our Web site: http://shop.panasonic.com/support
• FAQ and troubleshooting hints are available.

For your future reference
We recommend keeping a record of the following information to assist with any repair under warranty.

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Date of purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>(found behind the cover of the unit)</td>
<td></td>
</tr>
<tr>
<td>Name and address of dealer</td>
<td></td>
</tr>
</tbody>
</table>

Attach your purchase receipt here.

Panasonic Corporation of North America
Two Riverfront Plaza, Newark, NJ 07102-5490
© Panasonic Corporation 2020
Printed in Malaysia