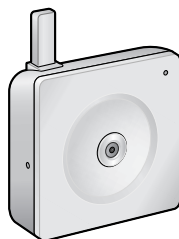


Panasonic

Troubleshooting

Network Camera

Indoor Use Only



Model No. **BL-C20**

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Abbreviations

- UPnP is the abbreviation for "Universal Plug and Play".
- "Network Camera" is called "camera" in this manual.
- "Setup CD-ROM" is called "CD-ROM" in this manual.

Troubleshooting

The Panasonic Network Camera support website "<http://panasonic.co.jp/pcc/products/en/netwcam/>" includes various technical information in addition to the contents in this troubleshooting section. Access the website if this troubleshooting does not solve your problem.

Indicator Display Troubleshooting

Problem	Cause and Remedy
The indicator lights or blinks orange.	<ul style="list-style-type: none"> The Ethernet cable is not connected properly. → Connect the Ethernet cable properly. The PC, the Ethernet hub or router is not working. → Confirm that PC, Ethernet hub and router are working. The switch on the side of the camera is set to WIRELESS when trying to connect in wired mode, or to WIRED when trying to connect in wireless mode. → Set the switch to the corresponding mode. The wireless settings do not match those of the router. → Set the same SSID, Communication mode and WEP as those of the router.
The indicator continues blinking orange.	<ul style="list-style-type: none"> The camera is turned off when updating firmware. → If you access the camera using a web browser, the Update Firmware page will be displayed. Update the firmware following the procedure (see page 114 of the Operating Instructions on the CD-ROM). If you fail to update the firmware, see page 17.
The indicator continues blinking orange (2-second interval).	<ul style="list-style-type: none"> The router on your network is turned off. → Turn the router on, and wait until the ADSL line is connected. Then turn the camera off and on again. An error has occurred in UPnP™ port forwarding. → Turn the camera off and on again. If the error still occurs, set up the camera again in [Automatic Setup] using the Setup Program following the instructions in Getting Started.

Problem	Cause and Remedy
The indicator continues blinking green.	<ul style="list-style-type: none"> • Automatic setup is not complete. → Complete the setup following the instructions in Getting Started. • The camera did not receive an IP address from the DHCP server. → When setting [Automatic Setup] or [DHCP Setup], the camera may not be assigned an IP address due to network failures. Ask your ISP or network administrator for more information.
The indicator does not light up.	<ul style="list-style-type: none"> • The indicator display is disabled. → Check if the indicator control is disabled (see page 110 of the Operating Instructions on the CD-ROM). • Confirm that the standard AC adaptor (Order No. PQLV206CEY [for use in countries/areas other than the United Kingdom], PQLV206EY [for use in the United Kingdom]) is being used.
The indicator continues blinking red.	<ul style="list-style-type: none"> • The camera may be malfunctioning. → If you cannot access the camera, the camera may be malfunctioning. Contact an authorized service center.
The indicator continues blinking orange during wireless communication.	<ul style="list-style-type: none"> • Signal strength is weak. → Change the location of the camera or remove any obstacle around the camera. • Only the MAC addresses for the camera's wireless module are set. → To enable the MAC address filtering feature on the wireless router, enter both the MAC addresses for the camera itself and the camera's wireless module.

Camera Setup Troubleshooting

Note

If you are experiencing any problems, it is recommended that you temporarily disable all firewall, pop-up killer, and virus detection software. Once the problem is identified and corrected, you can restart the Setup Program.

Problem	Cause and Remedy
DynamicDNS registration fails.	<ul style="list-style-type: none"> The router-connected PC has failed to access the Internet. → Refer to the router's manual and try to connect to the Internet through your PC. Once Internet connection has been confirmed, you can register to DynamicDNS.
The e-mail that includes the link to the viewnetcam.com service website is not sent.	<ul style="list-style-type: none"> Your registered E-mail address is incorrect. → Register your correct E-mail address on the Viewnetcam.com website at http://www.viewnetcam.com
Setup Program does not list any cameras.	<ul style="list-style-type: none"> Your firewall or antivirus software is blocking the connection. → To avoid any possible problems, temporarily disable any firewall or antivirus software, and set up the camera again. If you cannot disable your firewall or antivirus software, you can set up the camera using the MAC address (see page 138 of the Operating Instructions on the CD-ROM). The camera is connected over a different network. → Set up the camera from a PC connected to the same router as the camera. Confirm that an IP address is assigned to your PC. → If an IP address is not assigned to your PC, assign one (see page 133 of the Operating Instructions on the CD-ROM).

Problem	Cause and Remedy
Setup Program fails to complete successfully.	<ul style="list-style-type: none"> • More than 20 minutes have passed since the camera was turned on. → Disconnect the AC adaptor from the power outlet, and reconnect it again. Set up the camera again. • Network problems may have occurred during setup. → Confirm that your network is working. Disconnect the AC adaptor from the power outlet, and reconnect it again. Then set up the camera again. • Administrator settings are displayed, and setup is incomplete. → After executing factory default by pressing the FACTORY DEFAULT RESET button on the side of the camera, set up the camera again. • Multiple camera IP addresses are overlapping. → If you are installing multiple cameras, turn the cameras on one by one.
UPnP™ port forwarding setup fails.	<ul style="list-style-type: none"> • UPnP™ is disabled on the router. → Enable UPnP™ on the router following the router manual. • The camera was turned on before the router was turned on. → Turn the router on first, and then turn the camera on. • The default gateway is not set, or the settings are wrong. → Set the default gateway correctly (see page 45 of the Operating Instructions on the CD-ROM). • The router does not support UPnP™. → Enable port forwarding on your router following the router manual.
The camera IP address and port number have been forgotten.	<ul style="list-style-type: none"> • Clicking [Camera Setup] on the Setup Program displays the camera list. The camera list shows the MAC address labeled on the rear side. The camera IP address and port number are shown next to the MAC address.
The password has been forgotten.	<ul style="list-style-type: none"> • Press the FACTORY DEFAULT RESET button to reset the camera to default. Set up the camera again.

Problem	Cause and Remedy
An error message is displayed on the camera status by the Setup Program.	<ul style="list-style-type: none"> An error on the Setup Program caused the error message. <ul style="list-style-type: none"> → Disconnect the AC adaptor from the power outlet, and reconnect it again.

Wireless Communication Troubleshooting

Problem	Cause and Remedy
Wireless communication does not work.	<ul style="list-style-type: none"> Signal strength is weak. <ul style="list-style-type: none"> → Change the location of the camera or remove any obstacles around the camera. The SSID and Encryption settings of the camera are different from those of the wireless router. <ul style="list-style-type: none"> → SSID and Encryption settings must be identical for both the camera and wireless router. Wireless communication can be disconnected depending on the environment. <ul style="list-style-type: none"> → Click [Refresh] on the web browser tool bar.
Wireless communication is unstable.	<ul style="list-style-type: none"> The communication channel is the same as another wireless network. <ul style="list-style-type: none"> → Wireless communication may be improved by changing the channel of the router. Another nearby wireless device may be causing interference or the distance between the wireless camera and your wireless network may be too great. <ul style="list-style-type: none"> → Temporarily disable other wireless devices to identify the source of the interference. → Try repositioning the camera or moving it closer to your wireless router.

Problem	Cause and Remedy
<p>Though the camera is set to wired connection, the router's wireless indicator is on or blinking.</p>	<ul style="list-style-type: none"> • The camera emits electrical waves about 5 minutes after the power has been on, when set to wired connection. → Electrical waves will stop after about 5 minutes. Please wait.
<p>The camera cannot communicate with the wireless terminal.</p>	<ul style="list-style-type: none"> • Radio waves may not be reaching the wireless terminal or camera due to the distance between them, or the existence of obstacles such as a concrete wall. → Adjust the position of the wireless terminal or camera.

Camera Image/Page Display Troubleshooting

Problem	Cause and Remedy																																												
The camera cannot be accessed.	<ul style="list-style-type: none">• The camera IP address has changed.<ul style="list-style-type: none">→ Enter the correct IP address in the address bar of the web browser.• When accessing from the Internet, the default gateway or the DNS server address is not set in network settings, or is not set correctly.<ul style="list-style-type: none">→ Set the correct default gateway and DNS server address. Especially, when the DynamicDNS service is used, the IP address must be set correctly (see page 45 of the Operating Instructions on the CD-ROM).• The connection type is wrong (see page 49 of the Operating Instructions on the CD-ROM).<ul style="list-style-type: none">→ If the camera does not connect to the network using the [Auto Negotiation] setting, set up the camera and the router referring to the following table. <table><tr><th colspan="2" rowspan="2">Network Camera Router or hub</th><th rowspan="2">Auto Negotiation</th><th colspan="2">100Base-TX</th><th colspan="2">10Base-TX</th></tr><tr><th>Full Duplex</th><th>Half Duplex</th><th>Full Duplex</th><th>Half Duplex</th></tr><tr><td colspan="2">Auto Negotiation</td><td>✓</td><td>—</td><td>✓</td><td>—</td><td>✓</td></tr><tr><td rowspan="2">100Base-TX</td><td>Full Duplex</td><td>—</td><td>✓</td><td>—</td><td>—</td><td>—</td></tr><tr><td>Half Duplex</td><td>✓</td><td>—</td><td>✓</td><td>—</td><td>—</td></tr><tr><td rowspan="2">10Base-T</td><td>Full Duplex</td><td>—</td><td>—</td><td>—</td><td>✓</td><td>—</td></tr><tr><td>Half Duplex</td><td>✓</td><td>—</td><td>—</td><td>—</td><td>✓</td></tr></table>	Network Camera Router or hub		Auto Negotiation	100Base-TX		10Base-TX		Full Duplex	Half Duplex	Full Duplex	Half Duplex	Auto Negotiation		✓	—	✓	—	✓	100Base-TX	Full Duplex	—	✓	—	—	—	Half Duplex	✓	—	✓	—	—	10Base-T	Full Duplex	—	—	—	✓	—	Half Duplex	✓	—	—	—	✓
Network Camera Router or hub					Auto Negotiation	100Base-TX		10Base-TX																																					
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10Base-T	Full Duplex	—	—	—	✓	—																																							
	Half Duplex	✓	—	—	—	✓																																							

Problem	Cause and Remedy
<p>The camera cannot be accessed on the LAN.</p>	<ul style="list-style-type: none"> • The connected router does not have a loopback feature. → Access the camera with a local network IP address. • The wrong IP address class is assigned to the camera. → If you access the camera on the LAN, the PC IP address and the camera IP address must be set in the same class. Set the camera IP address same as the class of the PC IP address (see page 133 of the Operating Instructions on the CD-ROM). • The web browser is accessing a proxy server. → Set the web browser to access the Internet directly (see page 141 of the Operating Instructions on the CD-ROM). • The camera was accessed on the same LAN by entering the registered URL (or the router's global IP address) when using a DynamicDNS service. → To access a camera on the same LAN, use the address for its local network address.
<p>The camera can be accessed on the LAN, but cannot be accessed from the Internet.</p>	<ul style="list-style-type: none"> • The default gateway address may be wrong. → Set the correct default gateway address (see page 45 of the Operating Instructions on the CD-ROM). • UPnP™ is disabled on the router. → Enable UPnP™ on the router following the router manual. • Port forwarding is not enabled on the router (see page 55 of the Operating Instructions on the CD-ROM). → Enable port forwarding following the router manual. • Firewalls such as packet filtering on the router are blocking camera access. → Set the router to allow access to the camera following the router manual. • You are accessing the camera using a local IP address. → Access the camera with the global IP address of the router and port number of the camera.

Problem	Cause and Remedy
Authentication windows are consequently displayed.	<ul style="list-style-type: none"> The user name and password for the administrator have been changed. Or the user name and password for the general users have been changed. → Close the web browser, and access the camera again.
Only half of the image is displayed.	<ul style="list-style-type: none"> You are using Internet Explorer 4.xx or lower. → Upgrade Internet Explorer to version 6.0 or greater.
The camera image is not displayed, or not displayed properly.	<ul style="list-style-type: none"> ActiveX® Controls are not installed in Internet Explorer. → ActiveX Controls should be installed to display video (Motion JPEG). For the ActiveX Controls installation method, see page 29 of the Operating Instructions on the CD-ROM when using Microsoft® Windows® XP Service Pack 2, or see page 28 of the Operating Instructions on the CD-ROM when using other operating systems. The network is congested. → Pages may not be displayed immediately. Wait for a moment. The web browser is accessing a proxy server. → Set the web browser to access the Internet directly (see page 141 of the Operating Instructions on the CD-ROM).
Camera images are not displayed on the Multi-Camera page.	<ul style="list-style-type: none"> The images may not be displayed if private IP addresses and global IP addresses (or domain names) are mixed on the Multi-Camera page. → To view the images within the LAN, set the Multi-Camera page using private IP addresses. To view the images from the WAN side, set the Multi-Camera page using global IP addresses (or domain names) (see page 106 of the Operating Instructions on the CD-ROM).
The error message "ERROR CODE (4/12002)" is displayed, and the image is not displayed.	<ul style="list-style-type: none"> A wrong IP address or domain name may be set on the Multi-Camera page. → Set the correct IP address or domain name. If the correct IP address or domain name was already set, the network connection may be timed out. → Access the network when it is less busy, or close other software that is connected to the network.

Problem	Cause and Remedy
<p>The Top page or image is not displayed on the mobile phone.</p>	<ul style="list-style-type: none"> • Only the IP address and port number are entered. → Enter "/mobile" after entering "IP Address:Port Number". • A 320 × 240 resolution image is not displayed. → Mobile phones do not support 320 × 240 resolution images. • The file size of the image is exceeding the capacity of the mobile phone. → View the image at 160 × 120 resolution. • The mobile phone supports to only XHTML. → Enter "/mobileX" by following an IP address and port number.
<p>A gray screen is displayed.</p>	<ul style="list-style-type: none"> • There are currently more than 20 different users trying to access the video (Motion JPEG). → Reduce the number of users accessing the camera to below 20, or change the video to still images. • Operation time has been specified. → A gray screen is displayed outside the operation time. This is normal.
<p>Video suddenly changes to still images.</p>	<ul style="list-style-type: none"> • The video (Motion JPEG) display period is set on the Image Display page. → To view video continuously, set [Unlimited] for the limit continuous Motion JPEG (see page 103 of the Operating Instructions on the CD-ROM).
<p>The image is out of focus.</p>	<ul style="list-style-type: none"> • The lens has dust, dirt, fingerprints or moisture on it. → Clean the lens with a cotton bud (see page 132 of the Operating Instructions on the CD-ROM). • The object is too close to the camera. → The camera cannot focus at short distances (less than 0.3 m). Locate the object more than 0.3 m away from the camera.

Problem	Cause and Remedy
The color on the image is strange.	<ul style="list-style-type: none"> • The white balance is not set appropriately. → Adjust the white balance on the Camera page (see page 64 of the Operating Instructions on the CD-ROM). • The color display setting on your PC is set lower than 16 bits. → Set the color display to 16 bits or higher.
The brightness of the displayed image is not stable (hunting phenomenon*).	<ul style="list-style-type: none"> • The brightness of the object changes suddenly (e.g. when lighting is turned on in a dark area). → Adjust the brightness of the camera slightly by pressing "+" or "-" once. *The hunting phenomenon is when the image lightens, then darkens, then lightens repeatedly, without stabilizing to a constant brightness.
The image contains interference or horizontal lines, or the image may be white.	<ul style="list-style-type: none"> • The camera transmits a dark scene. → Make the scene brighter. When the camera transmits a dark scene, the camera image may become white, or horizontal lines may be displayed on the screen. This is one of the characteristics of a CMOS sensor. This is not a malfunction. • The AC Power Source Frequency setting is different from its value in your area. → Set the same value as in your area on the Setup page (see page 64 of the Operating Instructions on the CD-ROM). • The colors setting of the monitor is set to less than 16 bit high color. → Set it to 16 bit high color or greater.
An old image is displayed.	<ul style="list-style-type: none"> • Old images are temporarily stored on the web browser. → Set [Every visit to the page] on the web browser to check for temporary Internet files (see page 144 of the Operating Instructions on the CD-ROM).

Problem	Cause and Remedy
The image refreshes very slowly.	<ul style="list-style-type: none"> • Multiple users are accessing the camera. → Wait until fewer users are accessing the camera. • You are not using an Ethernet switching hub. → If you view multiple cameras on the Multi-Camera page without an Ethernet switching hub, the image refreshes slowly. Use an Ethernet switching hub. • The image may refresh slowly, depending on image resolution, image quality, network traffic, PC performance, or what is being viewed. • The max. bandwidth usage is limited. → Increase the max. bandwidth usage on your network (see page 45 of the Operating Instructions on the CD-ROM). • The camera is in color night view mode. → When enabling color night view mode, the image refreshes slowly. Disable color night view mode, or make the area around the camera brighter.
When accessing the camera, the Update Firmware page is displayed.	<ul style="list-style-type: none"> • The camera firmware may be damaged since the power was turned off during an update, etc. → Download the latest firmware from the Panasonic Network Camera support website and update the firmware (see page 114 of the Operating Instructions on the CD-ROM).
Images of moving subject are blurred or not displayed.	<ul style="list-style-type: none"> • Color night view mode is enabled. → When enabling color night view mode, the image refreshes slowly. Disable color night view mode, or make the area around the camera brighter.

Operation Bar Troubleshooting

Problem	Cause and Remedy
Some buttons on the operation bar are not displayed.	<ul style="list-style-type: none"> The access level is set to level 1 on the General User page. → Set the access level to level 2 (see page 71 of the Operating Instructions on the CD-ROM), or log in to the camera as an administrator.

Image Buffer/Transfer Troubleshooting

Problem	Cause and Remedy
The camera does not transfer an image by E-mail or FTP.	<ul style="list-style-type: none"> An error occurred during transmission to the E-mail or FTP server. → See the Protocol column on the Status page (see page 112 of the Operating Instructions on the CD-ROM), and check if the error is displayed. The default gateway and DNS server addresses are not assigned correctly. → Assign them correctly (see page 45 of the Operating Instructions on the CD-ROM). Your login ID and password for the E-mail or FTP are invalid. → Make sure that you enter your correct login ID and password. The camera cannot transfer the image since [No authentication] is set on the Trigger page. → Change the authentication method to [POP before SMTP authentication] or [SMTP authentication], and set the Login ID and Password (if you select [POP before SMTP authentication], set the POP3 Server IP Address), then try transferring by E-mail again (see page 74 and page 84 of the Operating Instructions on the CD-ROM). For E-mail transfer, the SMTP server supports authentication methods other than the PLAIN and LOGIN methods of SMTP authentication. For example, CRAM-MD5. → For SMTP authentication of the camera, only the PLAIN and LOGIN methods are supported. Confirm with your ISP.

Problem	Cause and Remedy
<p>The camera does not transfer an image only to a mobile phone.</p>	<ul style="list-style-type: none"> • The image quality is not set to [Mobile Phone] on the Image Buffer/Transfer page. → Set the image quality to [Mobile Phone]. • Some mobile phones do not support 320 × 240 resolution. → Set the resolution to [160 × 120].
<p>The image is slowed down on the Buffered Image page, or the camera transfers an old image.</p>	<ul style="list-style-type: none"> • The transfer interval is too short. → Set the transfer interval longer than the current setting (see page 76 and page 87 of the Operating Instructions on the CD-ROM).

Miscellaneous Troubleshooting

Problem	Cause and Remedy
The ActiveX controls cannot be installed.	<ul style="list-style-type: none"> Security software disables the ActiveX control installation. → Close the security software, and install the ActiveX controls again.
The firmware is not updated.	<ul style="list-style-type: none"> The firmware updating was not completed due to the power being turned off, network failure or other cause. → Update the firmware again following these steps. <div data-bbox="355 521 933 1032" data-label="Diagram"> <pre> graph TD A[Disconnect the AC adaptor from the power outlet, and reconnect it again.] --> B[Enter the IP address in the web browser to access the camera.] B --> C{Is the Top page displayed?} C -- No --> E[Update the firmware*2.] C -- Yes --> D[Access the Maintenance page and click [Status]*1. Check the firmware version on the Status page.] D --> F{Is the version updated?} F -- No --> E F -- Yes --> G[The firmware update is completed.] E --> G </pre> <p>The flowchart describes the steps to update the firmware. It starts with disconnecting the AC adaptor and reconnecting it. Then, the user enters the IP address in a web browser. A decision point asks if the Top page is displayed. If No, it goes to 'Update the firmware*2.'. If Yes, it instructs to access the Maintenance page and click [Status]*1, then check the firmware version. Another decision point asks if the version is updated. If No, it goes to 'Update the firmware*2.'. If Yes, it states 'The firmware update is completed.'. Both 'Update the firmware*2.' boxes lead to the final completion state.</p> </div> <div data-bbox="272 1065 952 1092" data-label="Text"> <p>*1 See page 112 of the Operating Instructions on the CD-ROM.</p> </div> <div data-bbox="272 1110 952 1166" data-label="Text"> <p>*2 See page 114 of the Operating Instructions on the CD-ROM about updating firmware.</p> </div>
The shortcut icon is not displayed in the My Network Places folder.	<ul style="list-style-type: none"> The UPnP™ Windows component is not installed in Windows XP or Windows Me. → Install the UPnP™ Windows component in Windows XP or Windows Me (see page 144 of the Operating Instructions on the CD-ROM).
The problem cannot be fixed.	<ul style="list-style-type: none"> Contact an authorized service center.

The information in this document is subject to change without notice.

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