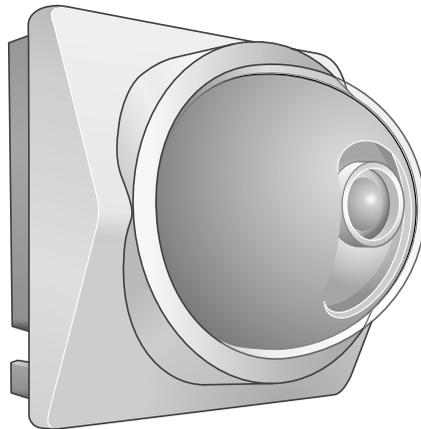


TOSHIBA

NETWORK CAMERA

Model: IK-WB01A
IK-WB11A

Advanced User's Guide



For information on the latest products and peripheral devices, refer to the following Web page.

■ <http://www.toshiba.com/taisisd>

The above URL is subject to change without prior notice. If the URL changes, refer to the Toshiba website (<http://www.toshiba.com/taisisd>).

This User's Guide applies to the firmware version 2 ** -2 ** -2 ** -1 ** and the later versions.

Product Name : NETWORK CAMERA
Model Number(s) : IK-WB01A, IK-WB11A



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

FCC Notice "Declaration of Conformity Information"

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.

Warning : Changes or modifications made to this equipment, not expressly approved by Toshiba or parties authorized by Toshiba could void the user's authority to operate the equipment.

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.

Toshiba America Information System, Inc.
Imaging Systems Division
9740 Irvine Boulevard,
Irvine, California 92618-1697
(800)288-1354

Industry Canada
This Class B digital apparatus complies with Canadian ICES-003.

Introduction

Thank you for purchasing the IK-WB01A/IK-WB11A Network Camera. Before you start using the camera, read this User's Guide carefully to ensure correct usage. Once you have finished reading this User's Guide, keep it in a convenient place for future reference. The design, specifications, software, and User's Guide contents are subject to change without prior notice.

IK-WB01A is designed for indoor-use only. You may use IK-WB11A either inside or outside.

Terms and Trademarks

- The term "OS" is used in this manual to indicate operating systems compatible with this product.
 - Windows 98SE: Microsoft® Windows® 98 operating system; Second Edition
 - Windows 2000: Microsoft® Windows® 2000 operating system
 - Windows XP: Microsoft® Windows® XP operating system
- The formal name of Windows® is Microsoft® Windows® Operating System.
- Microsoft® and Windows® are trademarks or registered trademarks of Microsoft® Corporation in the United States and other countries.
- Other product names appearing in this User's Guide may be trademarks or registered trademarks of their respective holders.
- Java™ and all Java-related logos and trademarks are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.
- Netscape™ and Netscape™ Navigator are registered trademarks of Netscape™ Corporation.
- Ubiquitous TCP/IP-OS Copyright(c) 2002 Ubiquitous Corp.

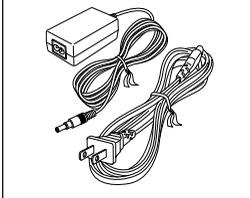
Introduction (Cont.)

Accessories

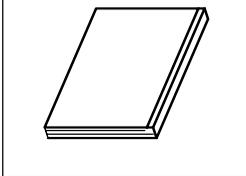
Confirm that all of the following accessories have been supplied with the network camera.

● Accessories common to IK-WB01A and IK-WB11A

AC adaptor (x1)
Power cord (x1)

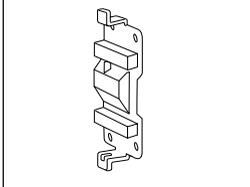


Basic User's Guide (x1)
Quick Start Guide (x1)



● Accessories for IK-WB01A

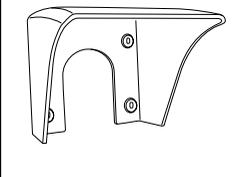
Wall attachment for indoor use (x1)



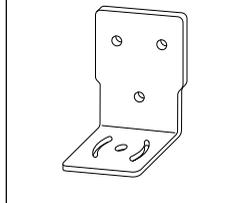
Screw set
• Self-tapping screw (x1)
(Black)
• Wood screws (x4)
(Silver)

Wire clamp (x1)
LAN cable (Straight-through cable) (x1)
Clamp filter (x2)
※ Put the Clamp filter to both ends of your LAN cable.

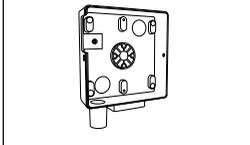
Sun visor (x1)



Wall bracket (x1)



Rear cover (waterproof cover and attachment holder for indoor and outdoor installation) with a tripod screw hole (x1)



Screw set
• M4 screws (x6)
(Silver)
• M3 screws (x4)
(Black)
• Self-tapping screw (x1)
(Black)
• Wood screws (x4)
(Silver)
LAN cable (Straight-through cable) (x1)
Wire clamp (x1)

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IMPORTANT SAFETY INSTRUCTIONS

When using this camera, always follow basic safety precautions to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all the instructions.
2. Keep the User's Guide for future reference.
3. Heed all warnings.
4. Follow all the instructions.
5. Wipe off any dust on the camera lens with a lens-cleaning cloth.
6. Do not place the camera near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
7. Protect the power cord from being stepped on or pinched particularly at plugs, convenience outlet, and the point where they exit from the unit.
8. Use only specified attachments/accessories such as stands, tripods, and brackets.
9. Do not touch the camera or the AC adaptor during lightning storms.
10. Unplug the power cord when you do not use the camera for a long period of time.
11. Refer all the services to qualified service personnel. Repairing is required when the camera has been damaged in any way, such as :if power cord or plug is damaged; the camera does not operate normally, the camera has fallen to the ground.

Precautions for Use

About the SD Memory Card(IK-WB11A only)

- There is a limit to the number of rewrites that is possible with the SD memory card. Replacing of the SD memory card when performing periodic maintenance of the camera is recommended.
- The camera supports the following SD memory cards. Do not use memory cards with other specifications.
SD memory card: 8, 16, 32, 64, 128, 256, and 512 MB SD memory cards (3.3 V) supported.
Physical interface: Part 1. Physical Layer Specification; Version 1.01
- Images may not be recorded or read correctly if an unsupported SD memory card is used with the camera.
- Carefully read the User's guide, precautions on use, and any other information supplied with a purchased memory card.
- An SD memory card can be used for the loop recording of images. The life-span (number of rewrites possible) of an SD memory card is greatly affected by the capacity of the SD memory card. The use of a 128, 256, or 512 MB large-capacity SD memory card is recommended for loop recording.
- To achieve maximum performance of the camera, the use of a Toshiba SD memory card is recommended. If a card of another company is used, the recording intervals may lengthen and the erasure time during overwriting may increase. As a result, the number of delivered frames of live video may decrease.
- Do not use a memory card containing the data recorded by another device with the camera as this may result in the camera not functioning correctly.
- Do not modify, overwrite the data, or change the folder name of an SD memory card. It may result in the camera not to function correctly.
- Data recorded with the camera do not comply with the image file format Exif and the DCF standard. If the SD memory card is to be removed to play images, use a personal computer to play the images. Other devices may not be capable of displaying the images.

Caution for wireless mode

- During wireless mode operation, try to leave minimum of 20cm (8 inches) spacing between people and the equipment.

About the AC adaptor

Be sure to use only the supplied AC adaptor. Using a different AC adaptor may cause the camera to malfunction, heat up, or catch fire. Before using the AC adaptor, carefully read and observe the IMPORTANT SAFETY INSTRUCTIONS (→ page 7) and the notes below.

- Do not allow the connectors on the AC adaptor to come into contact with any other metal object as this may result in short circuit.
- To connect the AC adaptor, firmly insert the plug on the end of the cable into the AC adaptor jack. Do not insert the plug into other jacks as this may cause a malfunction.
- When removing the connection cable, disconnect the cable by holding its plug. Do not disconnect the cable by pulling on the cable.
- Do not drop the AC adaptor or subject it to strong impact.
- Do not use the AC adaptor in hot and humid places.
- Do not use the supplied AC adaptor with devices other than this camera.
- Temperature increasing on the surface of the adaptor is normal. Before moving the adaptor to another location, unplug it from the wall outlet, and wait until its temperature decreases.
- Buzzing noises may come from inside. This does not indicate malfunction.
- Using the AC adaptor near a radio, TV, or cellphone may cause interference. Use the adaptor at sufficient distances from these devices.

Specifications

AC adaptor (AC-WB10)

Power supply	: 100 to 240 V AC, 0.5 A, 50/60 Hz
Rated output	: 10 V DC, 1.5 A
Operating temperature	: -20°C to +50°C (-4°F to +122°F)
Storage temperature	: -20°C to +65°C
External dimensions	: 50 x 32 x 85 mm (W / H / L)
Length of the cord	: 10 m

Viewing • Listening and Operation

- **Camera Administrator and User**
- **Viewing and Listening (Administrator)**
- **Operation of Live Camera Images by Administrator**
- **Using Playback Function**
- **Presetting of Camera Angle by Administrator**
- **Playing Recorded Alarm Images by Administrator**
- **Playing Recorded Normal Images by Administrator (IK-WB11A)**
- **Viewing and Listening (Users)**

Camera Administrator and User

This User's Guide explains use of the camera from the standpoints of the administrator and the user. This distinction is difficult to make, because normally the owner of a network camera is an administrator and a user. Therefore, the following will explain the use of the camera from both standpoints.

The network camera serves five main functions.

- (1) Viewing camera images
- (2) Listening to sound from the camera
- (3) Operating the camera
- (4) Recording Images from the camera
- (5) Configuring the camera

Whether each function is made available for the administrator and the user is determined for both standpoints from consideration of "what will be done" with the network camera. "Administrator" indicates the standpoint where all the functions of the camera can be used and "user" indicates the standpoint where functions such as the configuring of camera parameters are restricted. The camera differentiates between the administrator and the user via authentication at login.

The following shows the different functions that are available for the administrator and the user.

Function		Administrator	User
Viewing images	Live images	○	○
	Recorded images	○	×
Listening to sound		○	○
Operation	PAN (left/right)/TILT (up/down) operation	○	○ [*]
	Image playback, presets, starting scan/patrol, etc.	○	×
Recording	Recording on the camera	○	×
	Recording on the FTP server	○	×
Configuration		○	×

*User's PAN/TILT operation could be restricted by an administrator.

Viewing and Listening (Administrator)

The viewing of images, listening sound and operating cameras are not restricted to the administrator. The administrator can use all the functions. However, it is necessary for the administrator to log in through the "Administrator Login" screen, because an administrator who logs in from the "User Login" screen is subject to the same restrictions as users.

How to view images, listen sound and operate cameras are explained after the following administrator login procedure.

※ Install "JAVA™2" to display images and output sound correctly on an administrator's personal computer.(→ Basic User's Guide page 12)

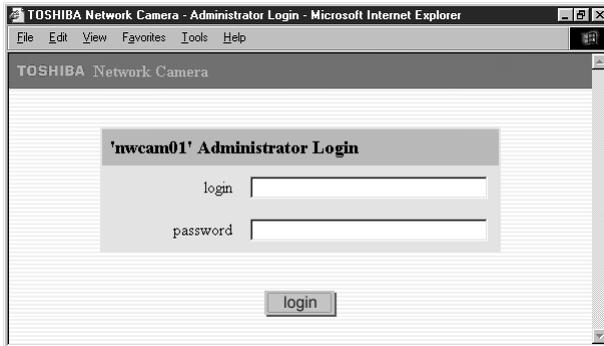
Administrator Login

You must enter the administrator's login ID and password first so that you can be verified as an administrator on the network camera.

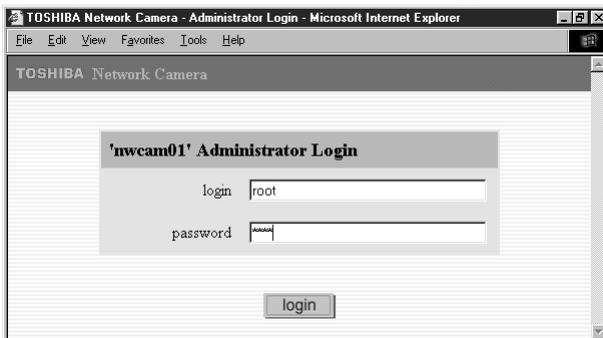
1 With the Internet browser displayed on the administrator's personal computer, enter the following URL and press ENTER

<http://192.168.0.30/admin.htm> (When IP address is in default setting)

If you enter this URL, the "Administrator Login" screen appears.



2 Correctly enter the administrator login ID and the password, and then click the "login" button



Viewing and Listening (Administrator) (Cont.)

Important

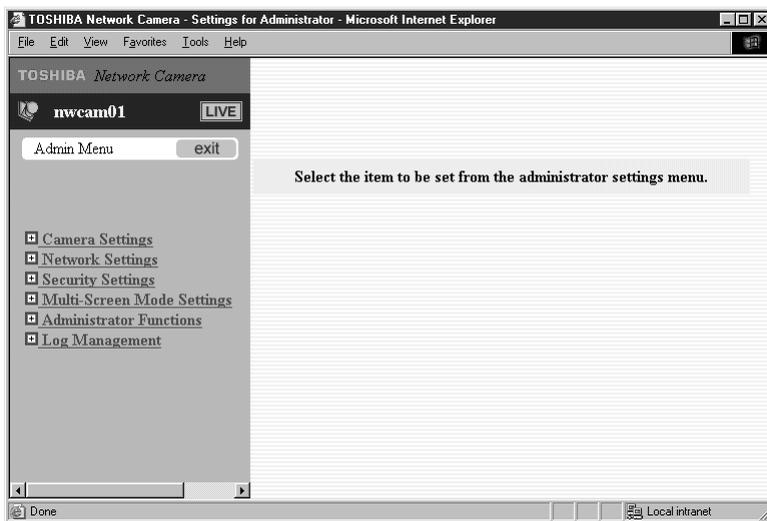
- At the time of purchase, the login ID is "root." and the password is "ikwb." For security reasons, change the login ID and password settings immediately (→ Basic User's Guide page 39).
- For the security reasons, if you leave the Admin Menu screen for more than 5 minutes without taking any actions, it automatically logs you out. If you were logged out, try login procedure to log in again.

Viewing Images by Administrator

■ Viewing Images in Single-View Mode by Administrator

If the Administrator Login was performed correctly, a window containing the Admin Menu appears.

1 Click the **LIVE** button

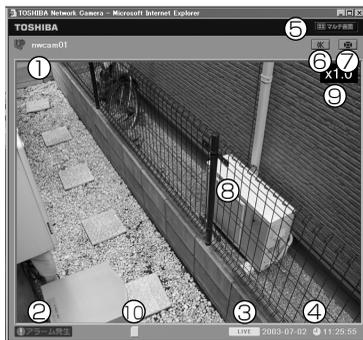


NOTE

- The boosted single-view mode screen by clicking the **LIVE** button is displayed in the same size as that of the sent image size from the camera. However, 1280x960 size of IK-WB11A is compressed into 800x600 when displayed.
- You may change the size of single-view mode screen bigger or smaller as much as you want.
- You may not see the full camera name or time display when you change the picture size to smaller one, but these will be fully displayed when you make the size bigger.

2 To close the camera image, click the button in the upper-right corner of the window

For an explanation on each component of the Single-View Mode window, refer to the table below.



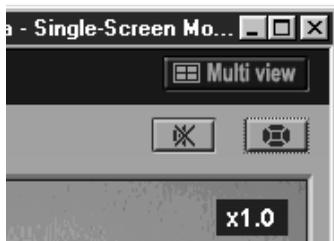
Number and Item	Description
① Camera name	The name of the camera displaying live images.
② Alarm notification 	This is displayed if the network camera detects motion (→ page 75) or an alarm goes off (→page 72). The  disappears if it is clicked.
③ Displayed images	When displaying present normal images, LIVE will be displayed, and when displaying images from the Alarm List or Record List (IK-WB1 1A), PLAYBACK will be displayed on the screen. You can switch these views using the controller.
④ Time and date	The current time and date of the network camera are shown when LIVE is displayed, and the recorded time and date* are shown when PLAYBACK is displayed on the screen. When in PLAYBACK mode, S) or E) may be shown with the time and date. S) (Start) indicates that the image is at the top of the playback images, and E) (End) indicates that the image is at the end. In this state, image or the time and date will not be renewed. Perform playback operation from the controller. *When playing images recorded in 1-second cycle on the SD memory card, even if images may seem to renewed in 2-second cycle, the images were recorded in 1-second cycle.
⑤ Switch views 	Clicking the  button switches the single-view mode to multi view. For details on multi view, refer to "Viewing Images in Multi-View Mode by Administrator" (→page 18).
⑥ Switch sound on/off 	If you click the  button, the button changes to  and outputs the sound. Clicking the  button changes the icon back to  and stops the sound.
⑦ Display controller 	Clicking the  button displays the controller in a separate window.

Viewing and Listening (Administrator) (Cont.)

Number and Item	Description
⑧ Move image center	Clicking a point in the image display area moves the lens up, down, left, or right accordingly and the clicked point becomes the center of the image. If the lens cannot move all the way in the specified direction, the clicked point does not become the center but the lens moves as far as it can.
⑨ Image magnification	Displays the magnification of the current camera image. The magnification of the camera can be controlled with Administrator controller (→page 23).
⑩ SD memory card (IK-WB11)	<ul style="list-style-type: none"><li data-bbox="404 360 983 384">■ : SD memory card has been inserted.<li data-bbox="404 384 983 504">⚠ : Card error. Recording/Playing functions won't work normally. Remove the card once and change to new one, or check the card by performing formatting and scan disk. You may format the card from the network camera directly. (see 96 page)<li data-bbox="404 504 983 652">F : The card is full. There is no more space to record images, or stopped the recording because number of generated alarm has reached to its max (100). Delete the data with your PC or insert new SD memory card. You may format and delete the contents of the card from the network camera directly. (see 96 page)

■ Logging out from Camera (Log Off)

- 1 Click **X** button in the upper-right corner to close the camera image window



- 2 Click **exit** button in the left side of the Admin Menu



The message, "Settings Completed." will be displayed.

- 3 Click **Close** button



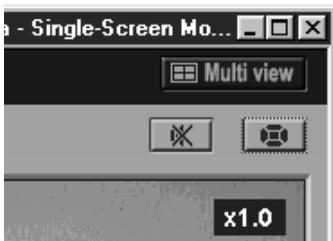
NOTE

- Do not close the Admin Menu when the single-view or multi-view screen is displayed. If you click the **exit** button when image screen is still displaying, the camera perceives it as the proof that you are still logged in. Remember, if this happens, you cannot log in again for 5 minutes.

Viewing and Listening (Administrator) (Cont.)

■ Viewing Images in Multi-View Mode by Administrator

- 1 At Step 2 on the previous page, click the  Multi view button in the upper-right corner of the window



- The Multi-View mode window appears. This window is automatically split into frames in accordance with the Multi-screen mode setting (→ page 103) for the number of cameras to display. For details on the number of cameras and multi-view mode, refer to "Multi-Screen Mode Window Configuration" (→ page 19).
-  Multi view button will not be displayed when you set "Multi-Screen Mode" setting to "OFF." (→ page 103)

- 2 Operating the multi-view mode

For an explanation on each component of the window, refer to "Multi-Screen Mode Window Components." (→ page 19)



- 3 To close the camera images, click the  button in the upper-right corner of the window

● Multi-Screen Mode Window Configuration

Number of Cameras Selected (Including Administrator's Camera)	Configuration
1 to 4	2×2
5 to 9	3×3
10 to 16、17 or more※	4×4

※ More than 16 cameras cannot be displayed simultaneously in the window. Select the cameras you want to display. (→ page 103)

● Multi-Screen Mode Window Components

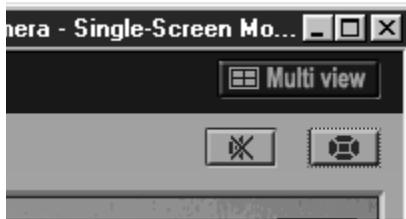
Number and Item	Description
① Camera name	Each individually given camera name is displayed in the corresponding camera screen.
② Alarm notification 	This icon is displayed for each network camera that detects motion (→page 75) or generates external alarm (→page 72). In the example window, the icon in the upper-left screen indicates that an alarm has gone off for the back door, and the icon in the lower-right screen indicates that an alarm has gone off for the garage. Usually (when no motion is detected or no alarm goes off), this icon does not appear. For details on the operations that you can perform when this icon appears, refer to "Playing Recorded Alarm Images by Administrator" (→page 31).
③ Displayed images	When the upper left screen of the Multi-View mode is displaying present normal images, LIVE will be displayed, and when displaying images from the Alarm List or Record List (IK-WB11A), PLAYBACK will be displayed on the screen. You can switch these views using the controller. Other network cameras always display current time and date.
④ Time and date	The current time and date of the network camera are shown on the upper left screen of the Multi-View mode when LIVE is displayed, and the recorded time and date are shown when PLAYBACK is displayed on the screen. When in PLAYBACK mode, S) or E) may be shown with the time and date. S) (Start) indicates that the image is at the top of the playback images, and E) (End) indicates that the image is at the end. In this state, image or the time and date will not be renewed. Perform playback operation from the controller. Other network cameras always display current time and date.
⑤ Switch views 	Clicking the  button displays the images of the upper-left screen in single-view mode. In the example window, the upper-left screen shows the back door. For details on single view, refer to "Viewing Images in Single-View Mode by Administrator" (→page 14).
⑥ Switch sound on/off 	If you click the  button, the button changes to  and outputs sound. Clicking the  button changes the button back to  and stops the sound. You can output or stop the sound from camera individually. You can output the sound from multiple cameras simultaneously. In the example, the sounds from the camera showing a back door and the camera showing a garage are played.

Viewing and Listening (Administrator) (Cont.)

Number and Item	Description
⑦ Display controller 	Clicking the  button displays the controller in a separate window. The procedure for displaying the controller is the same as that of single view. However, there is a controller for each camera screen and clicking the  button in a particular screen displays a controller that can only be used to operate camera images in that screen. In the example window, you can use the controller for the back door image to operate only that image. Therefore, if you want to operate other images, display each respective controllers.
⑧ Move image center	Clicking a point in the image display area moves the lens up, down, left, or right accordingly and the clicked point becomes the center of the image. If the lens cannot move all the way in the specified direction, the clicked point does not become the center but the lens moves as far as it can.
⑨ Image magnification	Displays the magnification of the camera image currently displayed. The magnification can be changed from the basic administrator controller. (→page 23)

Operation of Live Camera Images by Administrator

- 1 In administrator single-view or multi-view mode, click the  button



· The basic administrator controller is displayed in a separate window.

- 2 Use the controller to operate images

For an explanation on each component of the administrator controller, refer to "Basic Administrator Controller Components" (→ page 22).

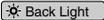
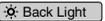
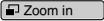
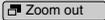


- 3 To close the controller, click the  button in the upper-right corner of the window

Operation of Live Camera Images by Administrator (Cont.)

● Basic Administrator Controller Components

Item	Description
Close 	Clicking the  button closes the controller.
Auto Patrol 	The Auto Patrol feature moves the lens automatically to all the configured preset positions in order. Clicking the  button starts Auto Patrol. If you do not want to display images captured while the lens is moving, enable the Freeze Activity function (→page 87). This allows you to view images at the preset positions only. Clicking one of  buttons stops the action.
Scan 	The Scan feature automatically moves (swivels) the lens horizontally back and forth once. Clicking the  button starts Scan. Clicking one of  buttons stops the action.
1 Shot 	This function converts an image to a picture data on the computer, and displays it on a new window. You can save the image as JPEG file here.
Controller 	<p>This feature adjusts the direction of the lens by panning (left/right) and tilting (up/down).</p> <ol style="list-style-type: none"> Each time you click the  button, the lens moves up. You can move the lens in a range of eight different vertical positions. When the camera lens reaches its upper limit, clicking on the button has no effect. Each time you click the  button, the lens moves left. You can move the lens in a range of eight different horizontal positions. When the camera lens reaches its left most limit, clicking on the button has no effect. Each time you click the  button, the lens moves down. You can move the lens in a range of eight different vertical positions. When the camera lens reaches its lower limit, clicking on the button has no effect. Each time you click the  button, the lens moves right. You can move the lens in a range of eight different horizontal positions. When the camera lens reaches its right most limit, clicking on the button has no effect. Clicking the  button returns the lens to its center position. If an external impact or other force moves the lens from its preset position, click this button to correct the position.

Item	description
Back Light 	This feature performs back light compensation. Clicking the  button performs back light compensation. Clicking the button again cancels compensation. When  is set to ON, the button turns to orange. When it is set to OFF, the button turn to white.
Zoom in 	This feature enables you to enlarge camera images by up to 5 times. Each click of the  button gradually enlarges images in the window. This feature enlarges images on the computer which have been received once, and not the direct image from the camera. Therefore, quality may deteriorate if you use this feature. ※Dragging the mouse pointer to enlarge the size of the window continuously enlarges the images.
Zoom out 	This feature enables you to the reduce camera images enlarged with Zoom in. Each click of the  button gradually reduces the images in the window. Once the images have been reduced to their actual size, you cannot zoom out anymore. ※Dragging the mouse pointer to reduce the size of the window continuously reduces the images.
Control buttons for playing and recording (⏪, ⏩, ⏮, ⏭, etc.) Preset Alarm Record	For details on these features, refer to the following pages. Control buttons for playing →page 25 Preset →page 26 Alarm list →page 31 Record list (IK-WB11A only) →page 34

NOTE

- Back Light Compensation causes the entire image to become brighter. Therefore, it may result in the burn out of highlighted areas of the image. If you would like to adjust burn outs, try clicking the  button to turn it ON/Off.

Using Playback Function

If you use this function when you are viewing live images, you can play and see the images of which right before you use the function. This function is valid only when the LIVE icon is displayed on the lower part of the single or multi-view mode screen. The length of the time of recorded images differs depending on the picture size and the quality. (It plays for approximately 1 minute when the size is 640x480 and the quality is MIDDLE.)

- 1 In administrator single-view or multi-view mode, click the  button



· The basic administrator controller is displayed in a separate window.

- 2 Use the controller to operate

For an explanation on each component of the controller, refer to "Basic Administrator Controller Components" (→ page 23).



- 3 To close the controller, click the **Close** button in the upper-right corner of the window

● Basic Administrator Controller Components

Item	Description
Other camera operation buttons	Refer to page 22,
Rewind 	This is the Rewind feature. Clicking the  button rewinds the recorded images in the window. When S) is shown on the time and date display, the playback image is rewound to the top.
Frame Backward 	This is the Frame Backward feature. Clicking the  button rewinds back the recorded images in the window by one frame.
Pause 	This is the Pause feature. Clicking the  button pauses the recorded images in the window.
Frame Forward 	This is the Frame Forward feature. Clicking the  button forwards the recorded images in the window by one frame.
Fast Forward 	This is the Fast Forward feature. Clicking the  button fast-forwards the recorded images in the window. When E) is shown on the time and date display, the playback image is forwarded to the end.
Live 	This feature returns the mode from Playback to Live. Clicking the  button displays live images in the window.
Playback 	Plays playback (recorded) images. In this state, the status display turns to PLAYBACK . When LIVE is displayed on the lower part of the Single-View screen or on the lower part of the upper left screen of the Multi-View screen, you can switch the display to the PLAYBACK mode.

Presetting of Camera Angle by Administrator

The presets function enables you to register up to ten different angles and names for the camera. Clicking the **Preset** button on the basic administrator controller opens the preset controller.

※ You cannot register zoom information.



Selecting a Preset

Selecting a pre-registered preset from the Preset list of the preset controller switches to the preset lens angle.

- 1 In the list, click the radio button on the left of the preset you want to select



- 2 Click the **Go** button



·The lens moves to the pre-registered position of the preset. If a position was not registered for the preset you selected, the lens does not move. Moving the lens using this feature requires the position of the preset to be registered beforehand. See "Configuring a Preset" in next page.

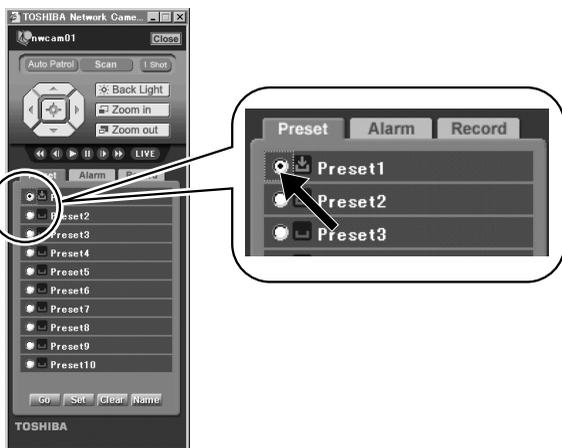
Presetting of Camera Angle by Administrator (Cont.)

Configuring a Preset

Register the lens position in the Preset list.

1 Click the  button to move the camera lens to the position you want to set

2 In the list, click the radio button on the left of the preset you want to configure



3 Click the **Set** button

· Register the current lens position in the selected preset.



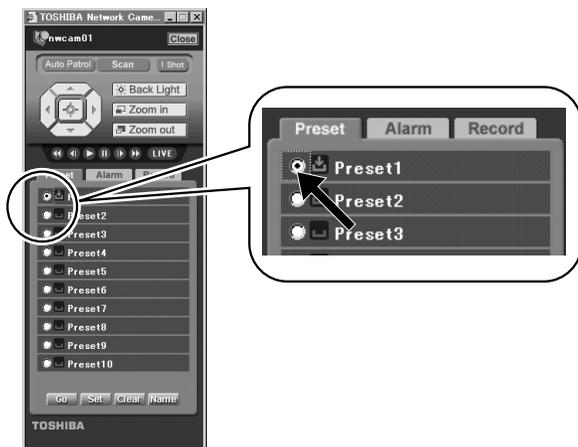
NOTE

- Any existing settings of a preset will be overwritten when you register new settings to the preset.

Deleting Preset Settings

You can delete the lens position setting of a preset in the Preset list.

- 1 In the list, click the radio button of the preset setting you want to delete



- 2 Click the **Clear** button

· The settings registered for the selected preset are deleted.



NOTE

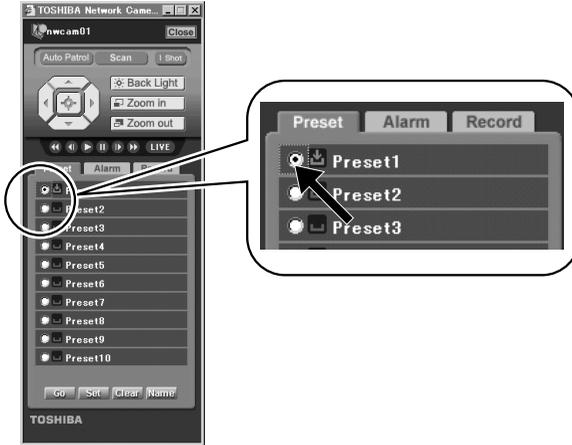
- Clicking **Clear** button also deletes the registered preset name.

Presetting of Camera Angle by Administrator (Cont.)

Naming/Renaming Individual Presets

You can name each preset in the Preset list. This makes it easier to distinguish individual preset settings.

- 1 In the list, click the radio button on the left of the preset you want to name



- 2 Click the **Name** button



· A window for naming the preset and the **Save** button appears.

- 3 Enter a new name and click the **Save** button



· The name appears instead of the preset number.

Playing Recorded Alarm Images by Administrator

The administrator can play images which are recorded when alarm goes off. The images play at fixed intervals regardless of the setting at the time of recording. Image settings such as "Camera Picture Size" correspond to the settings at the time the alarm went off.

How to play a recorded image

- 1 In administrator single-view or multi-view mode, click the  button



· The basic administrator controller is displayed in a separate window.

- 2 Click the  button

· The administrator controller for the Alarm list is displayed.



Playing Recorded Alarm Images by Administrator (Cont.)

NOTE

- When the administrator controller for the Alarm list is displayed, you can also use all of the features explained in "Basic Administrator Controller Components" (→ page 22).
- Items in the Alarm list appear from left to right in the order of list number, alarm type, generation time/date, and play button.
- If you click the  button at the bottom of the screen, the list of previous ten alarms appears. If you click the  button, the list of next ten alarms appears.
- If you click the  tab, the administrator controller returns to its original size.
- When FTP Recording function is set to ON, you cannot use or click on the  tab.
- When displaying Administrator Alarm List controller and saving the data when the FTP Recording function is set to ON, the Alarm List controller turns back to Administrator controller automatically. You cannot use or click on the  tab after that. Some browser may close the controller automatically.
- To be able to use or click on the  tab, set the FTP Recording function to OFF.

3 In the list, click the button on the right of the recording you want to play

- The recording selected in the Alarm list plays.

NOTE

- You can use the control buttons when playing a recorded image to, for example, rewind or fast-forward.
- To return from the recorded image to the live image screen, click the  button.
- While the Alarm list is displayed, click the  tab to switch to the Preset list and the  tab to switch to the Record list.
- When playing recorded alarm images, the camera will not record new alarm notification.
- When new alarm has been generated while the alarm controller is displayed, the notification will not be added to the list right away. In that case, close the controller once and re-display it.

● Alarm List Controller Components

Item	Description
Other camera operation buttons	Refer to page 22.
Rewind 	This is the Rewind feature. Clicking the  button rewinds the recorded alarm images in the window. When S) is shown on the time and date display, the Alarm image is rewound to the top.
Frame Backward 	This is the Frame Backward feature. Clicking the  button rewinds back the recorded alarm images in the window by one frame.
Pause 	This is the Pause feature. Clicking the  button pauses the recorded alarm images in the window.
Frame Forward 	This is the Frame Forward feature. Clicking the  button forwards the recorded alarm images in the window by one frame.
Fast Forward 	This is the Fast Forward feature. Clicking the  button fast-forwards the recorded alarm images in the window. When E) is shown on the time and date display, the Alarm image is forwarded to the end.
Live 	This feature returns the mode from alarm Playback to Live. Clicking the  button displays live images in the window.
Alarm Image Playback 	<p>This is the alarm Playback feature. Clicking on this button during Live image mode plays back before and after* images of detected Alarm. Clicking on this button when the recording is in a pause, frame backward, frame forward, rewind, or fast forward state returns the state to normal playback.</p> <p>* Numbers of recorded frame differ depending on numbers of Pre- or Post-recorded frame configured in Alarm Recording in Recording Settings. (see page 45, 95)</p>

Playing Recorded Normal Images by Administrator (IK-WB11A)

The administrator can play recorded normal images saved to an SD memory card. The images play at fixed intervals regardless to the setting at the time of recording. Image settings such as "Camera Picture Size" correspond to the settings at the time of recording.

How to play the recording

1 In administrator single-view or multi-view mode, click the  button



· The basic administrator controller is displayed in a separate window.

2 Click the **Record** button

· The administrator controller for the Record list is displayed.



NOTE

- When the administrator controller for the Record list is displayed, you can also use all the functions explained in "Basic Administrator Controller Components" (→ page 22).
- Items in the Record list appear from left to right in the order of list number, generation time/date, and play button.
- If you click the  button at the bottom of the screen, the list of previous ten recordings appears. If you click the  button, the list of next ten recordings appears.
- If you click the  tab, the administrator controller returns to its original size.
- When FTP Recording Function is set to ON, you cannot use or click on the  tab.
- When displaying Administrator Record List controller and saving the data when the FTP Recording Function is set to ON, the Record List controller turns back to Administrator controller automatically. You cannot use or click on the  tab after that. Some browser may close the controller automatically.
- To be able to use or click on the  tab, set the FTP Recording Function to OFF.

3 In the list, click the button on the right of the recording you want to play

- The recording selected in the Record list plays.

NOTE

- You can use the control buttons when playing a recorded image to, for example, rewind or fast-forward.
- To return from the recorded image to the live image screen, click the  button.
- While the Record list is displayed, click the  tab to switch to the Preset list and the  tab to switch to the Alarm list.
- Operation of recorded normal images is the same as the operation of recorded alarm images (→ page 31).
- Normal images are recorded by the hour.
- The camera cannot record normal images when playing recorded normal images.

Playing Recorded Normal Images by Administrator (IK-WB11A) (Cont.)

● Record List Controller Components

Item	Description
Other camera operation buttons	Refer to page 22.
Rewind 	This is the Rewind feature. Clicking the  button rewinds the recorded normal images in the window. When S) is shown on the time and date display, the recorded normal image is rewound to the top.
Frame Backward 	This is the Frame Backward feature. Clicking the  button rewinds back the recorded normal images in the window by one frame.
Pause 	This is the Pause feature. Clicking the  button pauses the recorded normal images in the window.
Frame Forward 	This is the Frame Forward feature. Clicking the  button forwards the recorded normal images in the window by one frame.
Fast Forward 	This is the Fast Forward feature. Clicking the  button fast-forwards the recorded normal images in the window. When E) is shown on the time and date display, the recorded normal image is forwarded to the end.
Live 	This feature returns the mode from Recorded Normal Image Playback to Live. Clicking the  button displays live images in the window.
Recorded Normal Image Playback 	This is the Recorded Normal Image Playback feature. Clicking on this button during Live image mode plays back the images* recorded in the period which configured in Normal Recording and Timer Recording in the Recording Settings. Clicking this button when the recording is in a paused, frame backward, frame forward, rewind, or fast forward state returns the state to normal playback. * Numbers of recorded frame differ depending on cycles which are configured in Normal Recording and Timer Recording in the Recording Settings. (see page 95)

Viewing and Listening (Users)

The viewing and listening are not restricted for users. However, the administrator may restrict the use of features. Basically, users can operate the lens from a remote location, but cannot configure camera presets or view recorded images. For details, refer to "Camera Administrator and User" (→ page 12).

How to view images, listen sound and operate cameras are explained after the following user login procedure explanation.

※ Install "Java™2" to display images and output sound correctly on a user's personal computer, (→ Basic User's Guide page 12).

User Login

If the administrator sets "User Restrictions" to "ON," users cannot access a camera unless they enter the user information (user ID and password) which the administrator configured.

Viewing Images in Single-View Mode by Users

1 With the Internet browser displayed on the user's personal computer, enter the following URL and press ENTER

<http://192.168.0.30/> (When IP address is in default setting)

· If you enter this URL, the User Login screen appears.



NOTE

- The login screen differs depending on whether or not the administrator is restricting the user. When there is no user restriction, login ID and password entering fields will not be displayed.
- The boosted single-view mode screen by clicking the LIVE button is displayed in the same size as that of the sent image size from the camera. However, 1280x960size of IK-WB1 1A is compressed into 800x600 when displayed. You may change the size of single-view mode screen bigger or smaller as much as you want.
- You may not see the full camera name or time display when you change the picture size to smaller one, but these will be fully displayed when you make the size bigger.

Viewing and Listening (Users) (Cont.)

2 Correctly enter the user login ID and the password, and then click the login button

- The camera images appear in single-view mode.



NOTE

- The configuration and way of performing operations for this window are the same as that of the administrator single view window except **LIVE** icon display. For details on the configuration and way of performing operations, refer to "Viewing Images in Single-View Mode by Administrator" (→ page 14).

Viewing Images in Multi-View Mode by User

- At Step 2 on the previous procedure, click the **Multi view** button in the upper-right corner of the window



- The Multi-Screen Mode window appears. This window is automatically split into frames in accordance with the Multi-Screen Mode settings (→page 103) for the number of cameras to display. For details on the number of cameras and multi view, refer to "Multi-Screen Mode Window Configuration" (→ page 19).



- Only the administrator can select which cameras will appear in multi-view mode screen. When the user switches to multi view, the multi view configuration corresponds to the cameras selected by the administrator.
- The configuration and way of performing operations for this window are the same as that of the administrator multi-view window. For details on the configuration and way of performing operations, refer to "Viewing Images in Multi-View Mode by Administrator" (→ page 18).

Viewing and Listening (Users) (Cont.)

Operating Live Camera Images by User

- 1 In user single-view or multi-view mode, click the  button



- The basic user controller is displayed in a separate window.

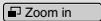
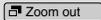
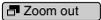
- 2 Use the controller to operate

- For an explanation on each component of the user controller, refer to "Basic User Controller Components" (→ page 4-1).



- 3 To close the controller, click the **Close** button in the upper-right corner of the window

● Basic User Controller Components

Item	Description
Close 	Clicking the  button closes the controller.
1 shot 	This function converts an image to a picture data on the computer, and displays it on a new window. You can save the image as JPEG file here.
Controller 	<p>This feature adjusts the direction of the lens by panning (left/right) and tilting (up/down).</p> <ol style="list-style-type: none"> 1. Each time you click the  button, the lens moves up. You can move the lens in a range of eight different vertical positions. When the camera lens reaches its upper limit, clicking on the button has no effect. 2. Each time you click the  button, the lens moves left. You can move the lens in a range of eight different horizontal positions. When the camera lens reaches its left most limit, clicking on the button has no effect. 3. Each time you click the  button, the lens moves down. You can move the lens in a range of eight different vertical positions. When the camera lens reaches its lower limit, clicking on the button has no effect. 4. Each time you click the  button, the lens moves right. You can move the lens in a range of eight different horizontal positions. When the camera lens reaches its right most limit, clicking on the button has no effect.
Zoom in 	<p>This feature enables you to enlarge camera images by up to 5 times. Each click of the  button gradually enlarges the images appearing in the window. This feature enlarges images on the computer which have been received once, and not the direct image from the camera. Therefore, quality may deteriorate if you use this feature.</p> <p>※Dragging the mouse pointer to enlarge the size of the window continuously enlarges the images.</p>
Zoom out 	<p>This feature enables you to reduce camera images enlarged with Zoom in. Each click of the  button gradually reduces the images appearing in the window. Once the images have been reduced to their actual size, you cannot zoom out anymore.</p> <p>※Dragging the mouse pointer to reduce the size of the window continuously reduces the images.</p>

NOTE

- User's "1 shot" function and the controller cannot be operated if an administrator restricts the use of PAN/TILT function of the users.

Recording

- **About Recording Images**
- **Recording Images on Network Camera**
- **Recording Images on SD Memory Card (IK-WB11A only)**
- **Recording Images on FTP Server**

About Recording Images

Network camera can record images according to your need. Recordable media and its recordable contents are as follows.

Recordable Media	Recordable Contents
Inside of Network Camera	<ul style="list-style-type: none">· Images of external alarm· Images of detected motion (IK-WB11A only)· Buffering (temporarily stored) images of last some seconds. (Recording time will differ depending on "Camera Picture Size" and "Picture Quality" (→page 90) settings.)
SD Memory Card (IK-WB11A only)	<ul style="list-style-type: none">· Alarm Recording images configured in "Alarm Recording" settings (→page 95).· Normal Recording images configured in "Normal Recording" settings (→page 95).
FTP Server	<ul style="list-style-type: none">· Data of "Periodic Recording by Schedule"· Data of "When Alarm goes off"

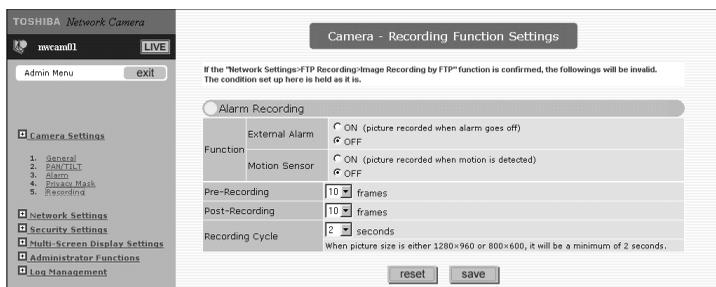
Recording Images on Network Camera

You may record two kinds of alarm images and images of last some seconds on the network camera.

To record alarm images, perform administrator login and configure "Alarm Settings" first (→ page 72 to 78), then follow the steps below to configure "Recording Function Settings".

■ Recording Function Settings (Alarm Recording)

- 1) Perform administrator login (→ page 13)
- 2) In the left side of the window, click the toggle (+) of "Camera Settings"
- 3) Click "Recording" in the sub menus
 - The settings appear in the right side of the window.
 - (This picture is an example of IK-WB11A)



4) Configure each setting items

- **Function**
Select ON or OFF for both "External Alarm" and "Motion Sensor" (IK-WB11A only).
- **Pre-Recording**
Pre-Recording records image(s) of right before alarm has generated. You can set numbers of frames you want to record. An image of the moment alarm has generated will not be included.
- **Post-Recording**
Post-Recording records image(s) of right after alarm has generated. You can set numbers of frames you want to record. An image of the moment alarm has generated will not be included.
- **Recording Cycle**
Configures recording cycle of Pre-Recording and Post Recording.

NOTE

- Total number of recorded image frames per one alarm will be the sum of Pre-Recording image(s) + an image when alarm has generated + Post-Recording image(s).

5) To finish configuring Recording Function Settings,

click the **save** button below the settings

- The changes are saved.

To restore the previous configuration,

click the **reset** button below the settings

- The changes are discarded.

Recording Images on SD Memory Card (IK-WB11A only)

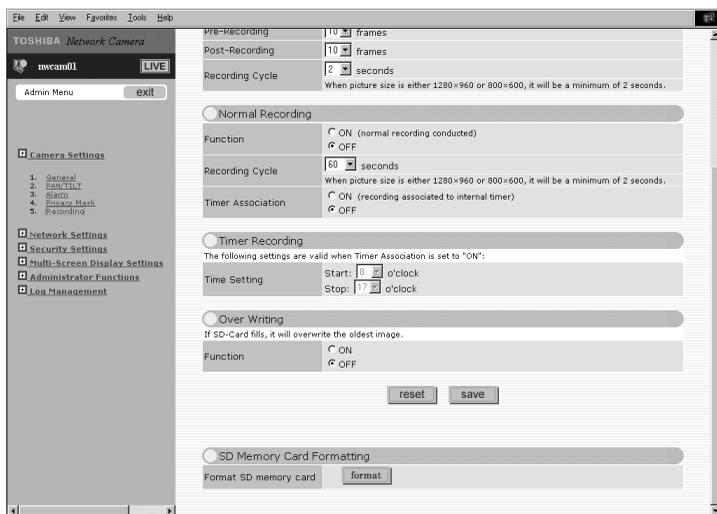
Alarm images and Normal Recording images can be recorded on SD memory card.

Perform administrator login and configure "Alarm Settings" first (→page 72 to 78), then follow the steps below to configure "Recording Function Settings".

※ See NOTE of "Recording Images on FTP Server" as well.

■ Recording Function Settings

- 1) Insert SD memory card to the camera (→ Basic User's Guide page 15)
- 2) Perform administrator login (→ page 13)
- 3) In the left side of the window, click the toggle (+) of "Camera Settings"
- 4) Click "Recording" in the sub menus
 - The settings appear in the right side of the window.
(This picture is an example of IK-WB11A)



5) Configure each setting items

- **Setting Alarm Recording**
Follow the instructions of Step 4 on page 45.
- **Normal Recording**
 - **Function**
Select ON or OFF.
 - **Recording Cycle**
Configure recording period of Normal Recording images.
 - **Timer Association**
Select ON or OFF. Configure settings of the timer in "Timer Recording".

- **Timer Recording**

Configure "Start" time and "Stop" time for the timer. This setting will be able only when "Timer Association" under "Normal Recording" is set to ON.

- **Over Writing**

This function overwrites the old data when SD memory card becomes full.

6) To finish configuring Recording Function Settings,
click the  button below the settings

· The changes are saved.

To restore the previous configuration,
click the  button below the settings

· The changes are discarded.

- **SD Memory Card Formatting**

All the data in SD memory card will be deleted by clicking  button.

Recording Images on FTP Server

By using FTP server, it becomes possible to manage periodic transferring and saving huge recorded image data. The images you can record on FTP server are "Periodic Recording by Schedule" and "When Alarm goes off" images.

NOTE

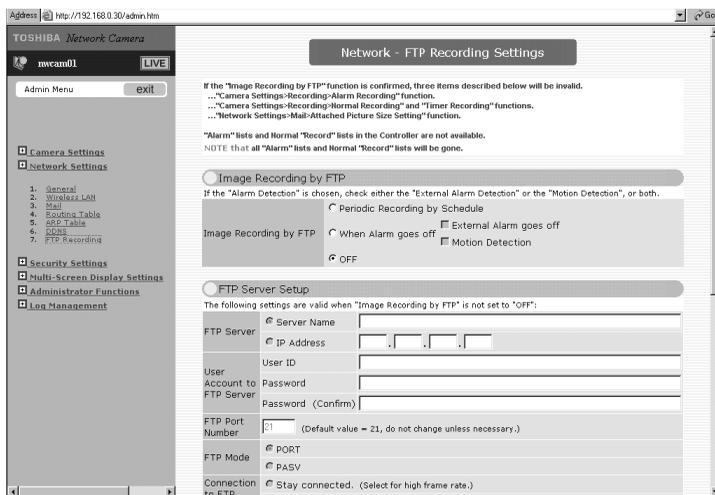
- When FTP function is set to on (selecting other than "OFF"), you cannot record Alarm/Normal images on SD memory card (IK-WB1 1A only).

Important

- Even though there are Alarm/Normal recording images saved on SD memory card (IK-WB1 1A only), these image data will be all deleted at the time FTP function is set to on (selecting other than "OFF"). Therefore, if there are necessary image data saved on SD memory card, insert another SD memory card to the camera or make the backup data before setting FTP function to on.

Recording Function Settings

- 1) Perform administrator login (→ page 13)
- 2) In the left side of the window, click the toggle (+) of "Network Settings"
- 3) Click "FTP Recording" in the sub menus
 - The settings appear in the right side of the window.
(This picture is an example of IK-WB1 1A)



4) Configure each setting items

- Image Recording by FTP:

Select either "Periodic Recording by Schedule", "When Alarm goes off" or "OFF". When selecting "When Alarm goes off", select "External Alarm goes off" and/or "Motion Detection" as well (IK-WB1 1A only).

• FTP Server Setup

This setting will be enabled when "Image Recording by FTP" setting is set to on (selecting other than "OFF").

• FTP Server:

Select either one of them below and enter correct information.

- Server Name (no more than 64 characters)
- IP Address (3-digit (or less) number each)

• User Account to FTP Server:

- User ID: Only for a user who has the right to access FTP server. Ask FTP server administrator for details. (no more than 64 characters)
- Password: Enter password registered with user ID above. (no more than 32 characters)
- Password (Confirm): Reenter the password.

• FTP Port Number:

- Usually, enter "21".

Important

- Do not change the port number unless your provider or the network administrator tell you to do so.

• FTP Mode:

- PORT (active mode): Usually, chose this one.
- PASV (passive mode): When the camera's network environment is protected by Firewall or the like, access from outside FTP server may not be possible with PORT (active mode). In this case, chose PASV (passive mode).

• Connection to FTP Server:

- Select "Stay connected" when transferring data frequently, like "Periodic Recording by Schedule". In this way, you can record images faster.

NOTE

- When selecting "Periodic Recording by Schedule", network camera logs in to FTP server automatically a minute before the scheduled recording starts. Even though the scheduled recording stops, when there are some unsent image data left in the camera, the camera will not log out from FTP server automatically until it transfers all the image data.
- When selecting "When Alarm goes off", network camera logs in/out automatically each time an alarm goes off. When there is more than one alarm at a time (receiving another alarm(s) while transferring a file), the camera logs out from the server after transferring last image data.
- Select "Re-connect" when data transfer is not so frequent. In this case, network camera logs in/out for each file transfer.

Recording Images on FTP Server (Cont.)

- **Conditions for Image Recording by FTP**
 - Configures recording conditions of recording style you have selected in "Image Recording by FTP". Click each item to set conditions.
 - "Periodic Recording by Schedule"- see page 51
 - "When Alarm goes off"- see page 53
- **Conditions for the Image Accumulation Inside of the Camera (IK-WB1 1A only)**

Configures whether or not to stock image data in SD memory card when the camera could not record image(s) on FTP server due to network problems.

 - **Image Accumulation:**
 - Select "ON" to stock image data on SD memory card.
Select "OFF" if you do not need to stock image data on SD memory card.

NOTE

- When selecting "ON" in Image Accumulation, SD memory card will be formatted. If there are necessary data on SD memory card, make backup data first.
- **Image Accumulation Cycle**
 - Configure recording cycle of accumulated images.
Possible setting ranges are as follows:
1*, 2, 5, 10, 15, 30, 60, 120, 300, 600, 900, 1800, 3600 (seconds)

*When image size is 1280x960 or 800x600, minimum cycle will be 2 seconds.
- **Over Writing**
 - Configures whether to overwrite the contents when SD memory card accumulation capacity becomes full.
ON: Overwrites the images from the old ones.
OFF: New images will not be saved.

NOTE

- Set "Image Accumulation" to "ON" before setting "Image Accumulation Cycle" and "Over Writing".

5) To finish configuring Recording Function Settings, click the button below the settings

- The changes are saved.

To restore the previous configuration, click the button below the settings

- The changes are discarded.

● Settings for "Periodic Recording by Schedule"

1) Click "Periodic Recording by Schedule" on "Conditions for Image Recording by FTP" (→ page50)

- Following screen appears on new window.

Image Recording by FTP - Periodic Recording by Schedule

The following settings are valid when "Image Recording by FTP" is set to "Periodic Recording by Schedule".
Set the schedule for each day-of-the-week below.

	Recording Schedule			
	OFF	All Day	Timer Pattern 1	Timer Pattern 2
Monday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuesday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wednesday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thursday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saturday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sunday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Set the Timer Pattern below.
When the Stop time is before the Start time, the Stop time will be the following day.

Timer Pattern 1 Start: o'clock - Stop: o'clock

Timer Pattern 2 Start: o'clock - Stop: o'clock

Recording Cycle One image is recorded for every seconds.
It may change according to picture size, a circuit situation, etc.

Recording File Name LV .JPG
Input the file name with a maximum of 16 characters.

Recording File Name LV shows LIVE pictures.
yyyyymmddHHMMSS is time and date that is added (year-month-day-hour-minute-second).
*** is three digits and serves as record with the old one where this number is smaller in the same time.
This number is not necessarily increasing every [1].
N "W"...not Daylight Saving, "D"...Daylight Saving.

Recording Directory on the FTP Server
Input the default directory of the FTP server.

2) Configure "Recording Schedule"

- Select one of the setting items for each day of a week.

"OFF": No recording at all.

"All Day": Records images all day.

"Timer Pattern 1": Records images in a period you configured in "Timer Pattern 1".

"Timer Pattern 2": Records images in a period you configured in "Timer Pattern 2".

3) Configure timer pattern

- You may configure both "Timer Pattern 1" and "Timer Pattern 2" and use them according to your need.

Possible setting timer range is between 0 am and 11 pm for both "Start" and "Stop".

NOTE

- When "Stop" time is set at earlier time than "Start" time, the "Stop" time will be a blank.

Recording Images on FTP Server (Cont.)

4) Configure "Recording Cycle"

- Setting ranges are: 0.03, 0.06, 0.1, 0.2, 0.5, 1, 2, 5, 10, 15, 30, 60, 120, 300, 600, 900, 1800, 3600.
- Configured recording cycle will be reflected to "All Day", "Timer Pattern 1" and "Timer Pattern 2".

NOTE

- The cycle may shift depending of image size and networking conditions.

5) Enter "Recording File Name"

- Enter characters (no more than 16 characters) in the part described as (keyword).

File name will be shown like this:

e.g. LV (Keyword) yyyy mm dd HH MM SS ***N.JPG

NOTE

- You cannot use these characters: \ / : ; , " | ? * < >

Followings are the meaning of each part.

LV	Indicates this is the "Periodic Recording by Schedule" file.
(Keyword)	Enter user defined keyword in 16 or less characters.
yyyymmdd	Indicates date (Year, Month, Day). (e.g. January 1, 2004 → 2004 01 01)
HHMMSS	Indicates time (Hour, Minute, Second). (e.g. 23:59:00 → 23 59 00). Time is displayed in 24-hour time display.
***	Series numbers. (→see page 55 for detail) If the camera records more than one image at the same period, the order is indicated with 3-digit number. The bigger the number, the newer (latest) the image.
N	Indicates Daylight Saving. N: Not in Daylight Time D: Daylight (Summer) Time

6) Enter "Recording Directory on the FTP Server"

- Configure FTP server directory to record files (Enter no more than 128 characters). If you do not know the directory, ask for your FTP server administrator.

7) Click to save configured items

- The display goes back to "Network - FTP Recording Settings" screen.
- To restore the previous configuration, click button below the settings.
 - The changes are discarded.
- To close the window without saving the configuration, click .

NOTE

- When you also have changed setting items in "FTP Recording", be sure to click in "Network - FTP Recording Settings" screen, too.

● Settings for "When Alarm goes off"

1) Click "When Alarm goes off" on "Conditions for Image Recording by FTP" (→ page 50)

- Following screen appears on new window.

Image Recording by FTP - Recording When Alarm goes off

The following settings are valid when "Image Recording by FTP" is set to either "External Alarm goes off" or "Motion Detection", or both.

Recording When Alarm detected

Pre-Recording: frames
When set to "MAX", the number of recording files depends on the "Camera Picture Size" and the "Picture Quality". Approximately 200 files in "640 x 480(VGA)" size and "MIDDLE" quality. Number of Pre-Recording frames may decrease according to a circuit situation, a recording cycle, etc.

Post-Recording: frames
Input numerically 0 through 1000. Number of Post-Recording frames may decrease according to a circuit situation, a recording cycle, etc.

Recording Cycle: seconds
One image is recorded for every 1 seconds. It may change according to picture size, a circuit situation, etc.

Recording File Name:
Input the file name with a maximum of 16 characters.
 EX "...external alarm, "MD"...motion detection.
 yyyyymmddHHMMSS is time and date that is added (year-month-day-hour-minute-second). This number is not necessarily increasing every [1].
 *** is three digits and serves as record with the old one where this number is smaller in the same time.
 N "...not Daylight Saving, 'D'...Daylight Saving.
 -- is an alarm identifier and circulates for every alarm from 00 to 99.
 A "...Pre-recording picture, 'C'..."Post-recording picture, 'B' serves as a picture of the moment the network camera detected alarm.

Recording Directory on the FTP Server:
Input the default directory of the FTP server.

Please also save "FTP Recording Settings", when the contents of "FTP Recording Settings" are changed.

2) Configure the numbers of frames you want to record for Pre-Recording

- Possible numbers of frames are as follows:

0, 1, 2, 5, 10, 30, MAX*

* When selecting "MAX", recording frame numbers will differ depending on configured "Camera Picture Size" and "Picture Quality"(→see page 90). When Camera Picture Size and Picture Quality are in default setting, image size is 640x480 (VGA) and quality is MIDDLE, approximately 200 frames will be recorded. Numbers of recorded image frame may decrease depending on networking conditions and recording cycle.

3) Configure the numbers of frames you want to record for Post-Recording

- Enter the number between 0 and 1000.

NOTE

- Numbers of recorded image frame may decrease depending on networking conditions and recording cycle.

4) Configure "Recording Cycle"

- Records 1 image per configured recording cycle (second).

Possible recording cycles are:

0.03, 0.06, 0.1, 0.2, 0.5, 1, 2, 5, 10

NOTE

- Cycle may change depending on image size and networking conditions.

Recording Images on FTP Server (Cont.)

5) Enter "Recording File Name"

· Enter characters (no more than 16 characters) in the part described as (keyword).

File name will be shown like this:

e.g. EX (Keyword) yyyy mm dd HH MM SS ***N--A.JPG

NOTE

• You cannot use these characters: \ / : ; , " ' ? * < >

Followings are the meaning of each part.

EX/MD	"EX" indicates this is the file for detected external alarm. "MD" indicates this is the file for detected motion (IK-WB11A only).
(keyword)	Enter user defined keyword in 16 or less characters.
yyyymmdd	Indicates date (Year, Month, Day). (e.g. January 1, 2004 → 2004 01 01)
HHMMSS	Indicates time (Hour, Minute, Second). (e.g. 23:59:00 → 23 59 00). Time is displayed in 24-hour time display.
***	Series numbers. (→see page 55 for detail) If the camera records more than one image at the same period, the order is indicated with 3-digit number. The bigger the number, the newer (latest) the image.
N	Indicates Daylight Saving. N: Not in Daylight Time D: Daylight (Summer) Time
---	Indicates total number of generated alarm(s). when the number reaches to 99, it returns to 00 and starts adding again.
A/B/C	A: Pre-Recording images. B: Image when alarm has generated. C: Post-Recording images.

6) Enter "Recording Directory"

· Configure FTP server directory to record files (Enter no more than 128 characters). If you do not know the directory, ask for your FTP server administrator.

7) Click to save configured items

- The display goes back to "Network - FTP Recording Settings" screen.
- To restore the previous configuration, click button below the settings.
 - The changes are discarded.
- To close the window without saving the configuration, click .

NOTE

• When you also have changed setting items in "FTP Recording", be sure to click in "Network - FTP Recording Settings" screen, too.

● Series Number

Series number is the number attached to a file when recording cycle is set at less than a second. When recording cycle is set at more than 1 second, series number will be displayed as 000.

Ranges of attached series number for recording cycle less than a second are as follows:

fps*	Ranges of Attached Series Number
30	000~029
15	000~014
10	000~009
7.5	000~007
5	000~004
2.5	000~002

* fps: frame/second (→see nextpage)

NOTE

- Numbers attached as series numbers will not necessarily increase by one. There may be a lack of numbers depending on Recording Cycle setting.

Recording Images on FTP Server (Cont.)

Recording Cycle of FTP Server Recording

Actually, recording cycle is counting JPEG Encode Output Rate (see tables below). Because of this, when recording cycle setting is set at less than a second, and depending on image size and frame rate settings, there may be a mode that cannot follow the FTP recording cycle configurations exactly.

JPEG Encode Output Rate

IK-WB01A (comparison with frame rate)

Image Size \ Frame Rate	VGA/QVGA/QQVGA	QVGA zoom QQVGA zoom
HIGH	7.5fps (0.13sec)	15fps (0.067sec)
MIDDLE	5fps (0.2sec)	10fps (0.1sec)
LOW	2.5fps (0.4sec)	5fps (0.2sec)

IK-WB11A (comparison with image quality)

Image Size \ Image Quality	VGA/SVGA/SXVGA	QVGA /QQVGA
HIGH	7.5fps (0.13sec)	7.5fps (0.13sec)
MIDDLE	7.5fps (0.13sec)	30fps (0.03sec)
LOW	7.5fps (0.13sec)	30fps (0.03sec)

NOTE

- When using Slow Shutter, FTP transfer frame rate will be lowered than above rate.
- When a value in parenthesis is larger than a value in FTP recording cycle setting, the value in parenthesis will be the actual recording cycle.

File Transfer Order

■ Periodic Recording by Schedule

Basically, files are transferred in recorded order. However, because of the differences on image accumulation functions between IK-WB11A and IK-WB01A, these cameras may take following processes depending on networking conditions.

● IK-WB11A

- 1) When networking condition causes the file transferring delay, the camera may transfer the old files in the file transfer intervals.
- 2) When files could not transfer are still left by the time transferring schedule comes to end, the camera will keep continue to transfer the files until it transfers all the files.

● IK-WB01A

Because IK-WB01A does not have "Image Accumulation" functions, there may be a lack of some files if condition of unable to transfer files continues for a long period of time.

NOTE

- Depending on the conditions of networking and FTP server, there may be occasions that cannot transfer files. In this case, only IK-WB11A is able to make backup data in SD memory card. Go to Network/FTP Recording menu screen and set "Image Accumulation" function under "Conditions for the Image Accumulation Inside of the Camera" to "ON". (→ see page 102) If you set this function to "ON", the files will be transferred to FTP server by following the process described in 2) above.

■ When Alarm Goes OFF

Basically, the files are transferred in the order described below:

C (Post-Recording images) → B (An image of the moment alarm has generated) → A (Pre-Recording images)

However, depending on conditions of FTP server and networking, or when another alarm has generated during the file transfer process, the camera will not necessarily follow the above transferring order.

Recording Images on FTP Server (Cont.)

Precedence of Recoding Functions

FTP Recording Function takes precedence over all other recording functions, such as Alarm/Normal (IK-WB11A only) recording functions. Function for recording images of last some seconds is always recording the images regardless of other functions.

- Even if the settings of "Alarm Recording" and "Normal Recording" (IK-WB11A only) are set to ON, these functions will be cancelled when the FTP recording function is set to ON.
- Even if the FTP recording function is set to ON, External Alarm and motion detections work normally and the alarm notifications and mail-sending functions will work normally as well. However, Alarm/Normal (IK-WB11A only) images will not be recorded; therefore, the images will not be attached to the mails.
- All the Alarm List images and Record (Normal) List images (IK-WB11A only) accumulated on the network camera will be deleted when FTP recording function is set to ON.
- SD memory card will be formatted automatically and its contents will be deleted when FTP recording function is set to ON. (IK-WB11A only)
- **You will not be able to use the Alarm List and Record List (IK-WB11A only) on the controller if you set the FTP recording function to ON.**
- Even if the controller is already displayed on the screen and the alarm/record (normal) images are in playback mode, the controller will go back to its start-up mode when FTP recording function is set to ON. The screen will turn to LIVE-mode screen from the PLAYBACK mode.

NOTE

- In some browsers, the controller may not go back to its original start-up mode and closes automatically instead.

Set up

- **Configuring the Camera**
- **Setting Items**
- **Returning to the Default Settings**
- **Updating the Firmware**

Configuring the Camera

Only the administrator can configure the network camera. For details on the settings the administrator can configure, refer to "Setting Items" (→ page 69). Enter the correct administrator information (administrator ID and password) to log in to the initial window for configuring settings. For details on administrator login, refer to "Administrator Login" (→ page 13).

The IP address 192.1.168.0.30 is used for the network camera in explanations hereafter.

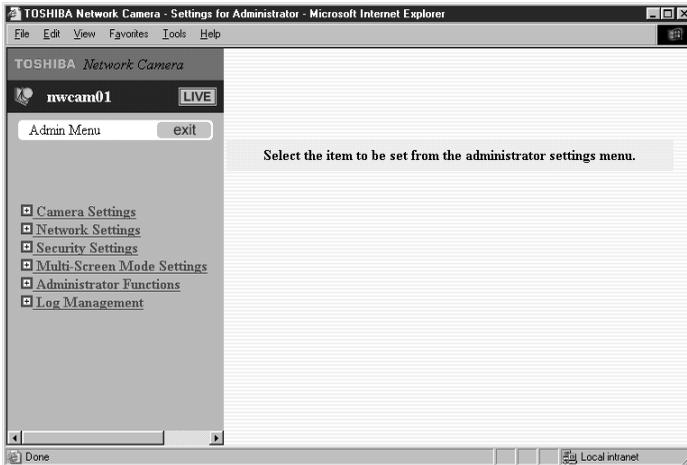
Configuring General Settings

The following explains the procedure for configuring settings. The procedure for performing operations here and other settings are exactly the same. For details on configuring some of the main settings, refer to "Main Setting Items" (→ page 63). For details on all other settings, refer to "Setting Items" (→ page 90).

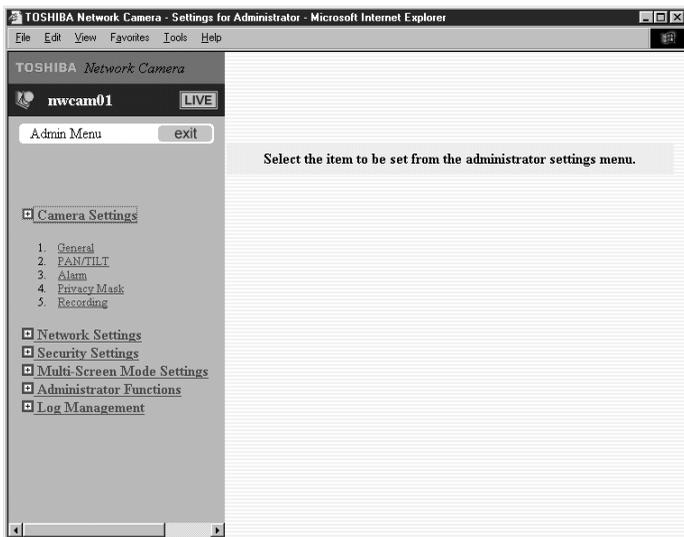
1 Perform administrator login (→ page 13)

- A window containing the Admin Menu appears.

2 In the left side of the window, click the toggle (+) of "Camera Settings", "Network Settings", "Security Settings", "Multi-Screen Mode Settings", "Administrator Functions", or "Log Management"



- The sub menus of the selected menu appear. If you selected "Camera Settings", the following sub menus appear.

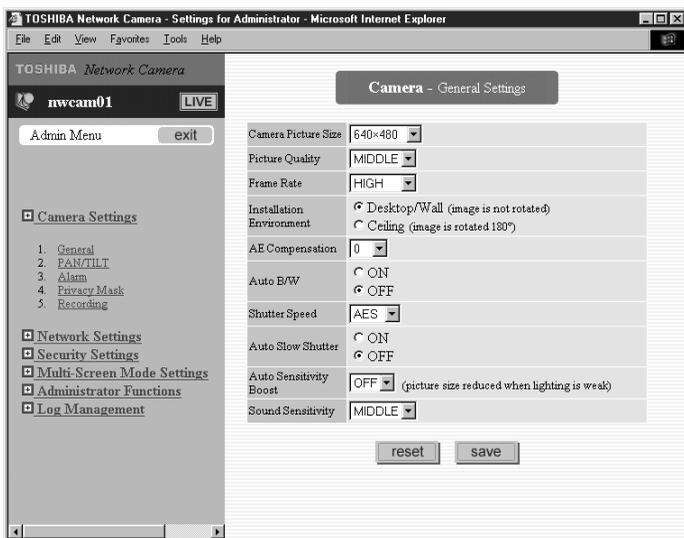


- If you click the toggle (+) of "Network Settings" or other menu while the menus are as above, the "Camera Settings" sub menus disappear and the sub menus of "Network Settings" or other menus appear.

3

Click a sub menu

- The settings appear in the right side of the window. (This image is the example of IK-WB1 1A)



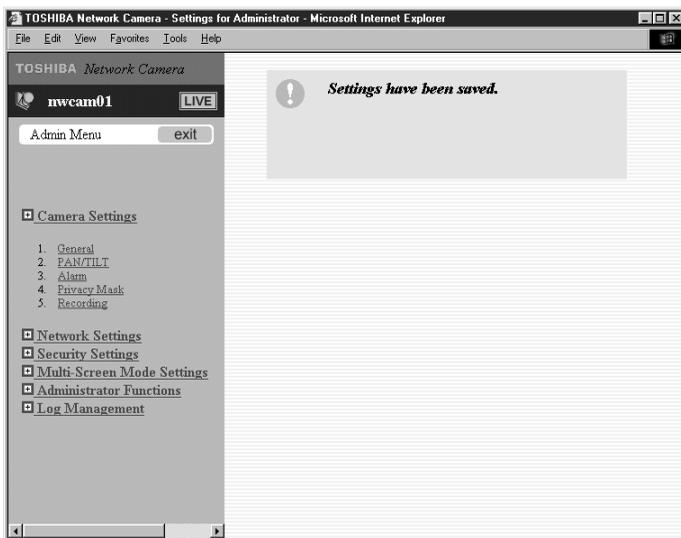
Configuring the Camera (Cont.)

4 Configure each setting

- For details on configuring settings, refer to "Main Setting Items" (→ page 63) or "Setting Items" (→ page 90).

5 After you have configured all the settings, click the button

- The settings are registered in the network camera and a message appears to inform you that camera configuration is complete.



- If you want to configure other settings, click another toggle (+) or menu and select the submenu of the settings you want to configure. Then, repeat Steps 4 and 5 above.

Important

- If the settings were configured incorrectly, they are not registered in the network camera and an input error message appears. Read the error message and reconfigure the settings accordingly.
- To register the settings in the network camera, be sure to click the button. The settings are not registered in the network camera when:
 - You close the setting window before saving the changes.
 - You click another menu in the left side of the window and different settings appear.

NOTE

- Clicking the button instead of clicking button at Step 5 restores the previous configuration.
- You do not need to restart the network camera to reflect the settings you have configured in the setting menus.

Main Setting Items

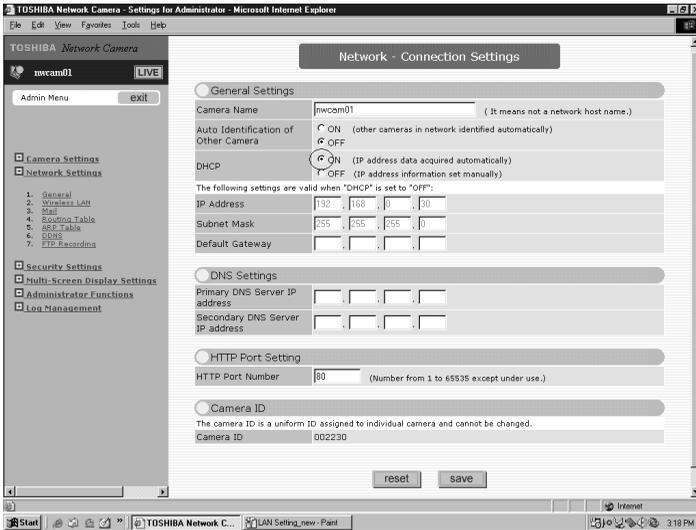
The following explains how to configure some of the main settings.

■ Configuring the IP Address

To connect to a network, it is necessary for the administrator to configure the network camera IP address.

There are two options for configuring the IP address.

- Obtaining an IP address automatically from the DHCP server
 - Entering an IP address manually
- Obtaining an IP address automatically from the DHCP server
- The "DHCP" setting is configured to "ON" by default. This allows you to connect to a network that uses a DHCP server without any settings. If the DHCP server cannot be found, the camera automatically uses the own IP address 192.168.0.30.



- Entering an IP address manually
- Enter an IP address manually if you do not want to use the DHCP server or the network does not use a DHCP server.
 - If you use the DHCP server, the IP address changes from time to time. Therefore, the IP address you set last time may not be valid next time, and you may not be able to access the camera.
- To be able to access the camera every time you use, you need to set fixed IP address (setting IP address manually) to the network camera.** If you do not know the pre-assigned IP address, consult the relevant support center or refer to the relevant manuals of the network devices (router, hub, modem, etc.).

Configuring the Camera (Cont.)

1 Perform administrator login (→ page 13) to open the Admin menu

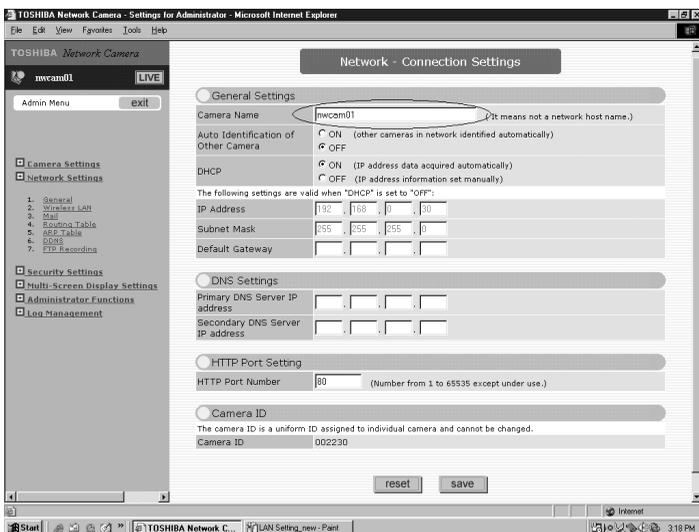
2 In the left side of the window, click the toggle (+) of "Network Settings"

- The sub menus appear.

3 From the list of sub menus, click "General"

- The settings appear in the right side of the window.

4 Enter the camera name



NOTE

- The camera name is displayed along with images in single-view mode or multi-view mode. If there are multiple cameras, enter a name that will make it easy to identify what the camera is monitoring.

5 Set "DHCP" to "OFF"

- The default setting is "ON." When you will set your own IP address without using DHCP server, set "DHCP" to "OFF."

6 Enter the IP address, subnet mask, and default gateway

Important

- If you do not know the subnet mask, consult the provider or relevant network system administration support center.
- You do not need to enter the default gateway if the network camera will not be accessed from another network. If you do need to enter a default gateway, consult your network system administration support center.

7 Click the button

- The settings are registered.

NOTE

- Clicking the  button instead of clicking  button at Step 7 restores the previous configuration.
- The network camera has a feature (useful for multi view) to automatically detects and remember other cameras on the same network. If there are other cameras on the same network, it is recommended to set "Auto Identification of Other Cameras" to "ON" (→ page 96).
- For details on configuring multi view, refer to configuring "Multi-Screen Mode Settings" (→ page 69).
- You need to reboot the network camera if you change any settings of the camera's network setting connection. Be sure to click on the  button on the save confirmation page after clicking  button.
- When you try to reconnect to the network camera, be sure to confirm that the entered IP address and HTTP port number are new ones if you changed the IP address and HTTP port number.

Configuring the Camera (Cont.)

■ Configuring Settings for Wireless LAN

To establish a wireless connection, it is necessary for the administrator to configure the appropriate wireless LAN settings. The administrator also needs to configure the IP address. For details on configuring the IP address, refer to "Configuring the IP Address" (→ page 63).

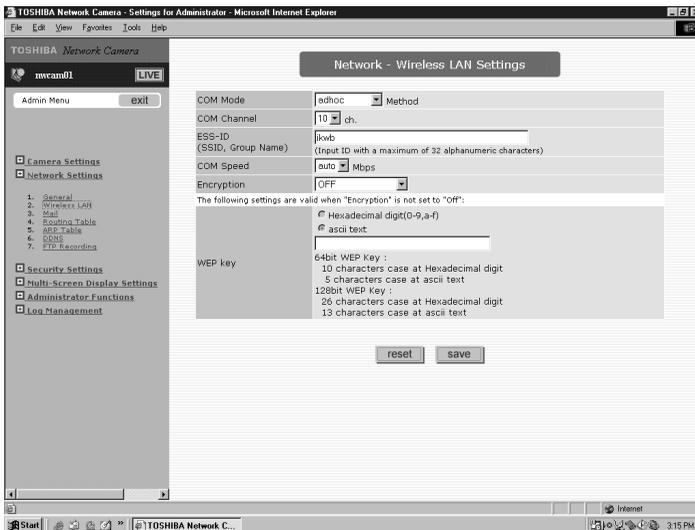
1 Perform administrator login (→ page 13) to open the Admin menu

2 In the left side of the window, click the toggle (+) of "Network Settings"

· The sub menus appear.

3 From the list of sub menus, click "Wireless LAN"

· The settings appear in the right side of the window.



4 Configure the communication mode

① Click ▼ for the "COM Mode" setting in the right side of the window.

② Select an item from the pull-down menu.

· If you are going to connect the network camera to the network via a wireless broadband router or access point (AP), select "infrastructure." If you are going to connect the network camera directly to a personal computer, select "adhoc."

5 Configure the communication channel

- ① Click ▼ for the "COM Channel" setting in the right side of the window.
- ② Select an item from the pull-down menu.
 - Channels 1 to 11 are available for use. If you are configuring the network camera to work in an existing wireless LAN environment, select the same channel.

NOTE

- If you cannot establish a satisfied wireless connection, try other channels and select the channel that enables the optimal connection.
- To have communication in adhoc method with the computer which cannot change the communication channel, start up the network camera in wireless LAN mode before turning on your computer.
- The network camera can communicate only on the configured channel of the camera.

6 Enter the ESS-ID

- If you are connecting the network camera to an existing wireless LAN, set the same ESS-ID as the existing wireless LAN environment. If you are configuring a new wireless LAN, make sure that you do not set the same ID as another existing wireless LAN.

Important

- There are restrictions on the values you can enter. You can only enter up to 32 alphanumeric characters.

NOTE

- ESS-ID is sometimes simply expressed as SS-ID, SSID, or network group name. In this manual we use "ESS-ID". This setting is an ID for identifying the wireless group when multiple wireless LAN groups exist in the network environment.

7 Configure the communication speed

- ① Click ▼ for the "COM Speed" setting in the right side of the window.
- ② Select an item from the pull-down menu.
 - You can set "1.0," "2.0," "5.5," or "11" Mbps, or "auto." Be sure to select "auto" unless you use special wireless LAN environment.

NOTE

- This setting determines the speed of the network camera communicating with other devices on the wireless LAN. The IEEE 802.11b standard supports the communication speeds of 1.0, 2.0, 5.5, and 11 Mbps. However, be sure to select "auto" unless you use special wireless LAN environment.

Configuring the Camera (Cont.)

8 Configure the WEP key

- ① Click ▼ for the "WEP Key" setting in the right side of the window.
- ② Select an item from the pull-down menu.
 - This setting determines the method used to encrypt data transferred during wireless communication. Typically, 64-bit and 128-bit WEP keys are used. (128-bit WEP sets tighter security)
 - You can select either of the two WEP keys or select not to use an encryption key. If you are connecting the network camera to an existing wireless LAN that uses a WEP key, set the same WEP key to the network camera.

NOTE

- WEP setting is not mandatory. Do not perform the WEP setting if you are not using WEP with your current wireless LAN.
- When you use encryption with the WEP key for the network camera, select the items for "Encryption" and "WEP Key" correctly. There are rules for entering the WEP keys used for wireless data encryption. Enter a 10-byte (hexadecimal digits) or 5-byte (ASCII text) character string for the 64-bit WEP key, and a 26-byte (hexadecimal digits) or 13-byte (ASCII text) character string for the 128-bit WEP Key. Configure the WEP Key by referring tables below.
- Sometimes "64-bit WEP" is described as "40-bit WEP", in here, we use the term "64-bit WEP." This means that other wireless devices using 40-bit WEP are using the same level of security as and are compatible with devices that use 64-bit WEP.
- When you do not perform encryption of the data by WEP, your wireless communication could be intercepted easily by third party. By using WEP for your data encryption, it becomes very difficult to decode the data. Because of this, it is recommended to do WEP setting if you are using wireless communication.

WEP Key Setting

	64bit WEP Key	128bit WEP Key
ASCII text	Number of Characters: 5 characters Characters You Can Use: Alphanumeric characters (0 to 9, a to z, A to Z)	Number of Characters: 13 characters Characters You Can Use: Alphanumeric characters (0 to 9, a to z, A to Z)
16 hexadecimal	Number of Characters: 10 characters Characters You Can Use: Alphanumeric characters (0 to 9, a to f, A to F)	Number of Characters: 26 characters Characters You Can Use: Alphanumeric characters (0 to 9, a to f, A to F)

※There is no distinction between capital letters and small letters.

WEP Key Setting (Example)

	64bit WEP Key	128bit WEP Key
ASCII text	nwcam	toshibaikwb01
16 hexadecimal	abcd1048ef	1234567890abcdef0987654321

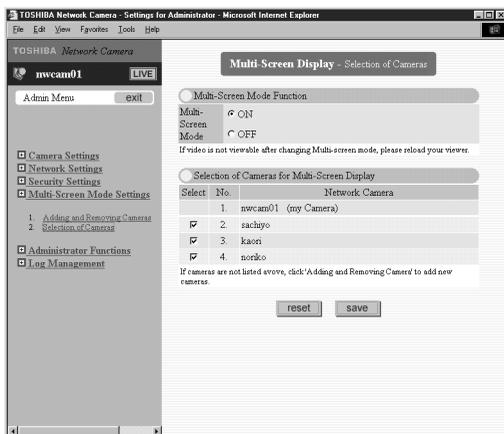
■ Configuring Multi-Screen Mode Settings

● Selecting Multiple Cameras

The images of network cameras selected by this setting appear in multi-view mode.

1) In the left side of the window, click the toggle (+) of "Multi-Screen Mode Settings", and then click the sub menu "Selecting Cameras"

- The settings appear in the right side of the window.



2) Set "Multi-Screen Mode" to "ON"

3) From "Selection of Cameras for Multi-Screen Display," select cameras (check boxes)

4) Click the button

- The settings are registered in the network cameras.

Configuring the Camera (Cont.)

NOTE

- Clicking the **reset** button instead of clicking **save** button at Step 4) restores the previous configuration.
- When "Multi-Screen Mode" is set to "OFF," **Multi view** button will not be displayed and cannot switch to the multi-view mode screen.
- Even if you have checked other network cameras which have been auto-detected by the main network camera, and if you could not communicate with these cameras for a while, images from these network cameras cannot be displayed on the Multi-View screen.
- Even if you are able to reconnect with these cameras, if these cameras are considered as not registered in the system, the selection check marks may have been taken off. In this case, reconfirm whether the check is marked or not to the network camera.
- The auto-detection of other network cameras' registered contents will be cleared each time you turn on or off the camera. Along with this, selection check marks of Multi-View screen display will be cleared as well. Therefore, after you turn on, off or reboot the camera, make sure to confirm the selection check marks.
- All the manually registered information of the network camera will be preserved regardless of rebooting or turning on or off the power.

● Adding Multiple Cameras

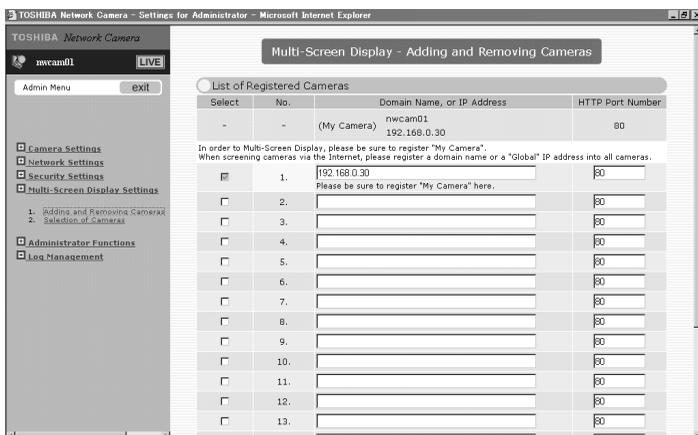
The network camera has a feature to automatically detect other cameras on the same network. If you want to display images from network cameras, which are on other networks, in multi-view mode, register them on the "Multi-Screen Mode Settings" "Adding and Removing Cameras" screen.

1) In the left side of the window, click the toggle (+) of "Multi-Screen Mode Settings"

- The sub menus appear.

2) From the list of sub menus, click "Adding and Removing Cameras"

- The settings appear in the right side of the window.



3) Enter a domain name or an IP address

4) Enter the HTTP port number

5) Click the button

- The settings are registered in the network cameras.

NOTE

- Clicking the button instead of clicking button at Step 5) restores the previous configuration.
- You can use any of the following procedures to confirm whether the network camera of an entered IP address has been registered.
 - In the left side of the window, click "Multi-Screen Mode Settings".
 - From the list of sub menus of "Multi-Screen Mode Settings", click "Selection of Cameras".

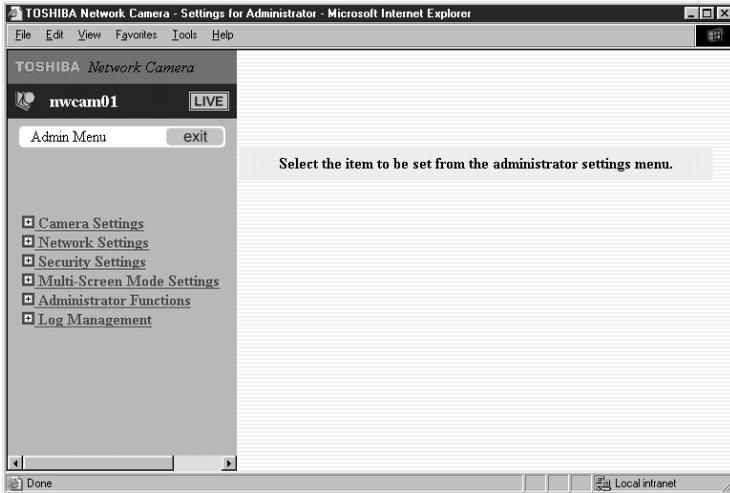
Configuring the Camera (Cont.)

■ Configuring External Alarm Settings

If you connect a sensor or other device to the alarm input terminal (→page 116), an alarm will notify you when the sensor detects anything out of the ordinary. For example, if you connect a sensor attached to a door, an alarm can notify you when the door is opened or closed.

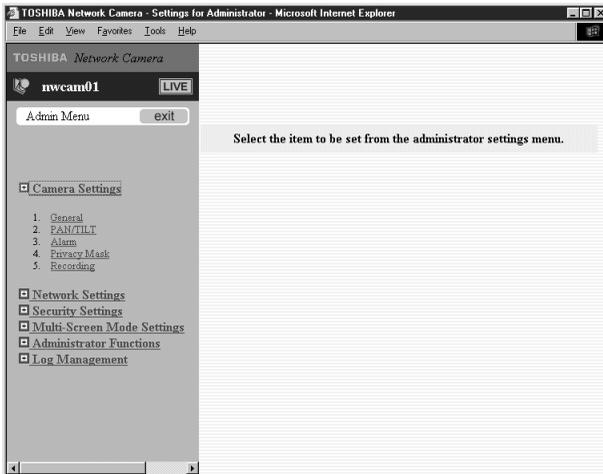
1) Perform administrator login (→ page 13)

- A window containing the Admin Menu appears.



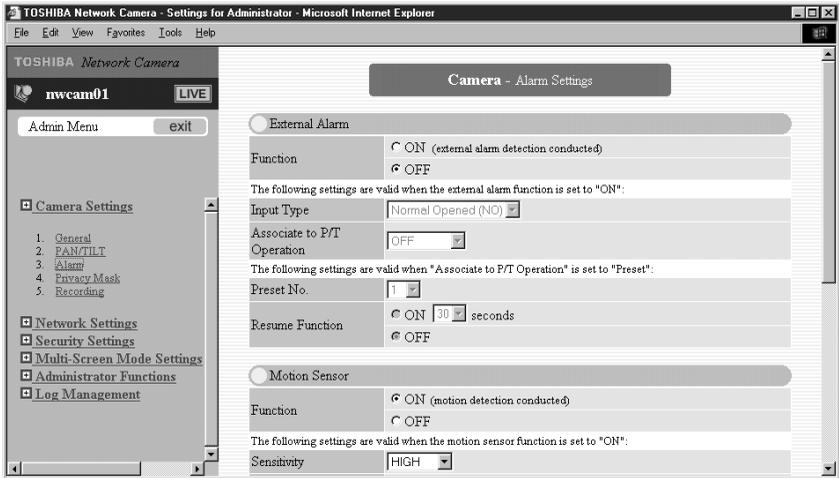
2) In the left side of the window, click the toggle (+) of "Camera Settings"

- The sub menus appear.

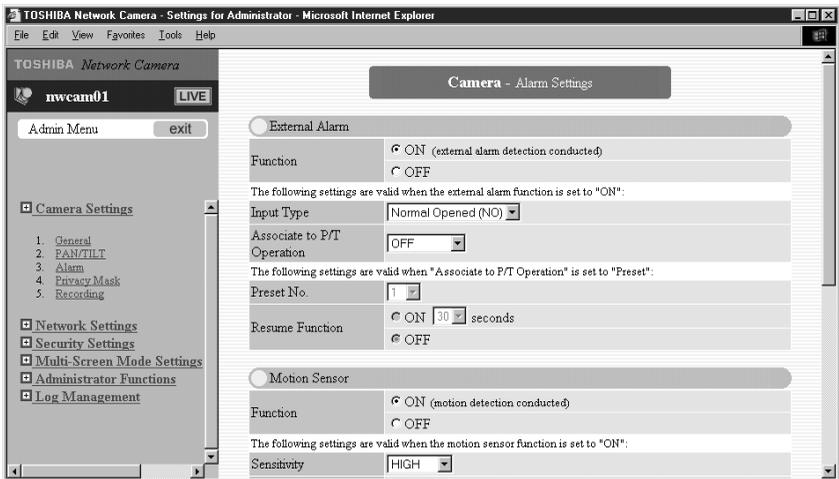


3) From the list of sub menus, click "Alarm Settings"

The settings appear in the right side of the window. (This image is the example of IK-WB1 1A)



4) Set "Function" of the "External Alarm" setting to "ON"



Configuring the Camera (Cont.)

5) Configure each of the other settings

• Input Type (alarm notification conditions)

This is the setting for external alarm input method. Set the conditions depending on kinds of sensor you are using.

Normal Opened (NO) : Non-Voltage point method. It opens the point (circuit) when nothing is happening (normal), and closes when alarm has generated.

Normal Closed (NC) : Non-Voltage point method. It closes the point (circuit) when nothing is happening (normal), and opens when alarm has generated.

※ The default setting is "Normal Opened (NO)."

• Associate to P/T Operation (camera operation when an external alarm went off)

OFF : The lens will not move even if an alarm has generated.

Preset : The lens moves to the preset position specified for "Preset No."

Auto Patrol : The lens moves each preset positions in order, and after one lap, moves back to the position where before the Alarm has generated.

(Available Settings when "Preset" is Selected Above)

• Preset No. (number of the preset which shows the camera images when an external alarm has gone off)

1 to 10

※For example, you can select the preset number of a lens position for showing the area around a sensor or other device attached to a door.

• Resume Function (returns the lens to the position where it was when the alarm went off)

ON : When a fixed period of time elapses after the lens moved in response to an alarm, the lens returns to the position where it was when the alarm went off.

OFF : After the lens moved in response to an alarm, the lens stays still at the position of the selected preset.

• Resume Time (period of time until the Resume function starts)

10, 30, 60 seconds

NOTE

- The "Preset No.," "Resume Function," and "Resume Time" settings are only valid when "Preset" is selected for "Associate to P/T Operation."

6) To finish configuring the alarm settings,

click the **save** button below the settings

- The changes are saved.

To restore the previous configuration,

click the **reset** button below the settings

- The changes are discarded.

To configure other alarm settings,

proceed to the next section

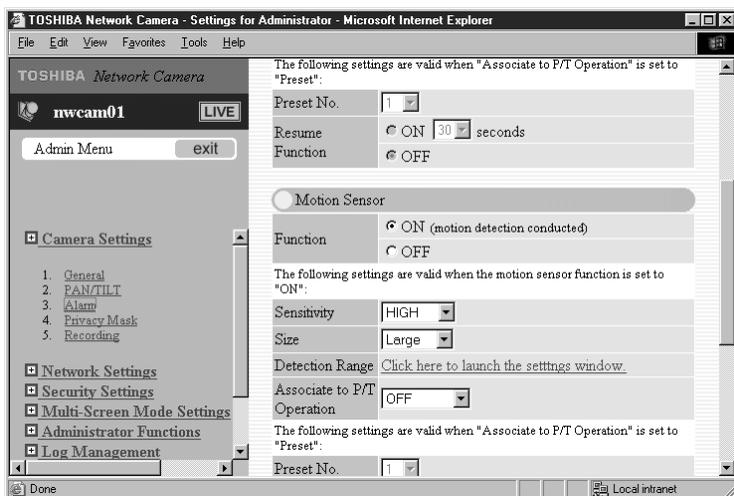
NOTE

- For details on connecting alarm input components, refer to the respective manuals of the components.

■ Configuring Motion Sensor Settings (IK-WB11A)

If you set "Function" of the "Motion Sensor" to "ON," an alarm will notify you a change detected.

1) Set "Function" of the "Motion Sensor" setting to "ON"



Configuring the Camera (Cont.)

2) Configure each of the other settings

• Sensitivity (detection sensitivity level)

Configures sensitivity for changing brightness.

HIGH : Generates an alarm upon detection even to the slightest change in brightness.

MIDDLE : Sensitivity is at a level between HIGH and LOW.

LOW : Generates an alarm upon detection of significant changes in brightness only.

※ The default setting is "MIDDLE."

※ If an alarm is detected frequently when there are no abnormalities, reduce the level of sensitivity.

• Size (detection size)

Configures the ability to detect movement.

Large : Generates an alarm upon detection even to the slightest movement. The camera can detect easily any movement.

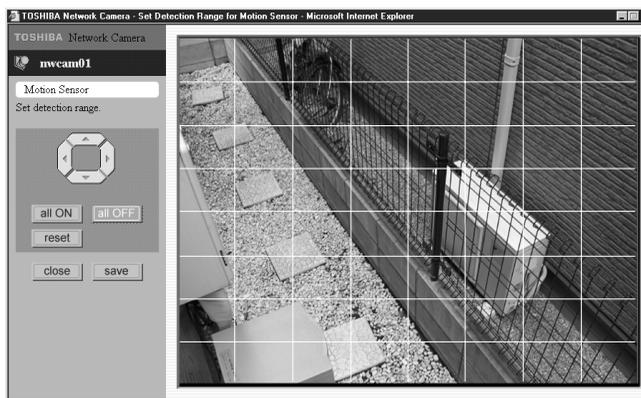
Medium : Detection size is at a size between "Large" and "Small".

Small : Generates an alarm upon detection of significant movement only.

※ If an alarm generates frequently even in normal occasion, change the setting to "Small."

• Detection range (range within which you can configure the motion sensor to work)

① When you click "Click here to launch the settings window", the range setting screen (8X8 squares) appears.



- ② Paint out any square you want to set the sensor by clicking it
 · To undo this action, click the square again.

Setting the sensor outside the current displayed range of the screen

- (1) In the left side of the window for configuring the range, click

the  button.

- (2) Paint out any square you want to set the sensor by clicking it

- Click the **all ON** button to paint out all squares.
- Click the **all OFF** button to unset all squares.

- ③ Click the **save** button

- The settings are saved and the window for configuring the range closes.
- Clicking the **close** button closes the window for configuring the range without saving the changes.

NOTE

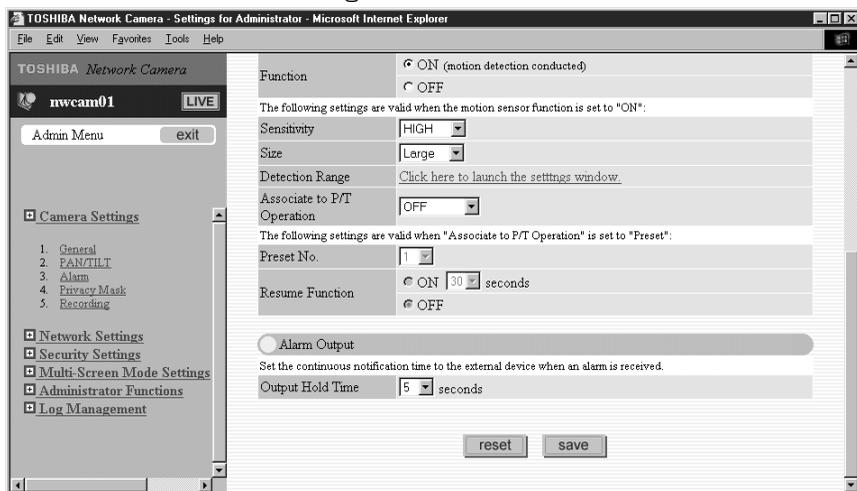
- The squares you have selected as the motion detection range will be turned to transparent green.
- Squares set for Privacy Mask (→ page 85) are already painted out in (dark) black.
- Clicking the **reset** button discards all unsaved changes.

• Associate to P/T Operation (camera operation when a motion alarm went off)

OFF : The lens will not move even if an alarm has generated.

Preset : The lens moves to the preset position specified for "Preset No."

Auto Patrol : The lens moves each preset positions in order, and after one lap, moves back to the position where before the Alarm has generated.



TOSHIBA Network Camera - Settings for Administrator - Microsoft Internet Explorer

File Edit View Favorites Tools Help

TOSHIBA Network Camera

nwcam01 **LIVE**

Admin Menu **exit**

Camera Settings

- General
- PANTILT
- Alarm
- Privacy Mask
- Recording

Network Settings

Security Settings

Multi-Screen Mode Settings

Administrator Functions

Log Management

Function ON (motion detection conducted)
 OFF

The following settings are valid when the motion sensor function is set to "ON":

Sensitivity

Size

Detection Range [Click here to launch the settings window.](#)

Associate to P/T Operation

The following settings are valid when "Associate to P/T Operation" is set to "Preset":

Preset No.

Resume Function ON seconds
 OFF

Alarm Output

Set the continuous notification time to the external device when an alarm is received.

Output Hold Time seconds

reset **save**

Configuring the Camera (Cont.)

Available Settings when "Preset" is Selected

- **Preset No.** (number of the preset which images the camera shows when an external alarm has gone off)
1 to 10
- **Resume Function** (returns the lens to the position where it was when the alarm went off)

ON : When a fixed period of time elapses after the lens moved in response to an alarm, the lens returns to the position where it was when the alarm went off.

OFF : After the lens moved in response to an alarm, the lens stays still at the position of the selected preset.

- **Resume Time** (period of time until the Resume function starts)
10, 30, 60 seconds

NOTE

- The "Preset No.," "Resume Function," and "Resume Time" settings are only valid when "Preset" is selected for "Associate to P/T Operation."
- Detection range of the motion sensor is the range the camera is monitoring. If there were some movements in where out of the camera monitoring range, the movements cannot be detected.

3) To finish configuring the alarm settings,

click the button below the settings

- The changes are saved.

To restore the previous configuration,

click the button below the settings

- The changes are discarded.

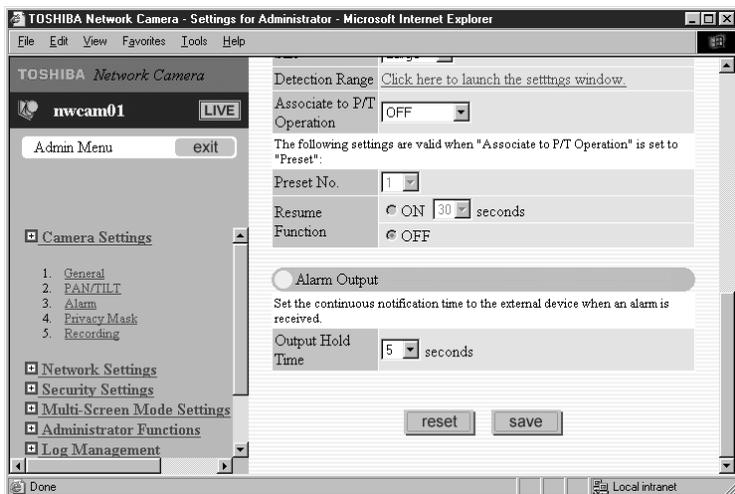
To configure other alarm settings,

proceed to the next section

■ Configuring Alarm Output Settings

The alarm output terminal (→page 116) facilitates the use of a siren, buzzer, emergency light, or other device when an alarm goes off.

1) Set the alarm notification time for "Output Hold Time" of the "Alarm Output" setting



- This setting is only valid if a light or other component is connected to the alarm output terminal.
- Select a time from 1, 5, 10, 15, 30, and 60 seconds.

NOTE

- A new alarm cannot be received while an alarm recording (sound) is playing.

2) To finish configuring the alarm,

click the button below the settings

- The changes are saved.

To restore the previous configuration,

click the button below the settings

- The changes are discarded.

NOTE

- For details on connecting alarm output components, refer to the respective manuals of the components.

Configuring the Camera (Cont.)

■ Configuring Mail Settings

Network cameras have a feature for sending mail.

If you configure this feature, mail is sent when:

- An external alarm goes off.
- Motion is detected. (IK-WB1 1A)
- The internal battery runs out of power.
- The IP address is changed.

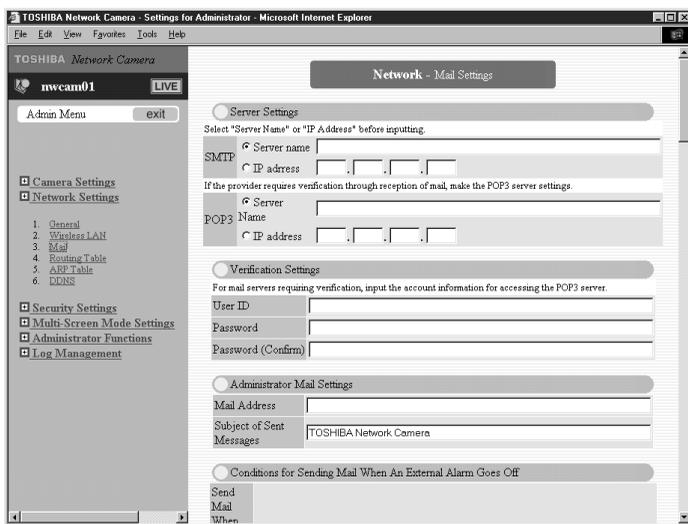
● Configuring conditions for sending mail

1) In the left side of the window, click the toggle (+) of "Network Settings"

- The sub menus appear.

2) From the list of sub menus, click "Mail"

- The settings appear in the right side of the window.



3) Enter the IP address or server name (host name) of the SMTP

- Enter the SMTP server information specified by the provider.

NOTE

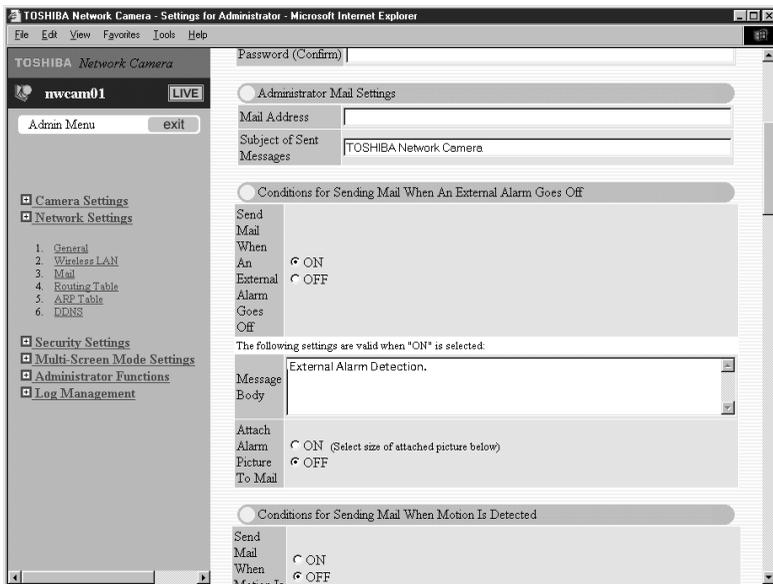
- Some providers verify users (POP before SMTP) by receiving mail. If you cannot send mail even if these items are correctly configured, enter the ID and password for verifying the IP address or server name (host name) of the POP3 server.
- POP3 is a protocol for receiving (retrieving) mail from the mailbox. However, these settings will not result in received mail, for example, being deleted because the network camera does not retrieve mail.
- The mail function of the network camera does not support "SMTP Auth".

4) Enter the administrator mail address

- Correctly enter the mail address specified by the provider.

The following explains how to configure settings related to when mail should be sent.

● Configuring the conditions of sending mail when an external alarm goes off or motion is detected.



1) Configure the "Conditions for Sending Mail When An External Alarm Goes Off" setting

- Set the sending of mail when an external alarm goes off to "ON" or "OFF."

NOTE

- The default setting is "OFF."

Configuring the Camera (Cont.)

2) Enter the Message Body and configure the "Attach Alarm Picture To Mail" setting

- The text entered here becomes the body of messages. To the actual body of a message, the time/date when the alarm went off and the camera name are added to the text entered here.
- If "ON" is set for "Attach Alarm Picture To Mail," the image saved by the network camera, when an external alarm was detected, is attached to a message at the size specified for "Attached Picture Size."

NOTE

- The attached image data is in a format that ordinary mail client software can read.
- When FTP Recording Function is set to ON, you cannot attach image(s) to a mail. However, the values you have set will be preserved.

3) Configure the "Conditions for Sending Mail When Motion Is Detected" setting

- Set the sending of mail when motion is detected to "ON" or "OFF."

NOTE

- The default setting is "OFF."

4) Enter the Message Body and configure the "Attach Motion Picture To Mail" setting

- The text entered here becomes the body of messages. To the actual body of a message, the time/date when a motion was detected and the camera name are added to the text entered here.
- If "ON" is set for "Attach Motion Picture To Mail," the image saved by the network camera, when motion was detected, is attached to a message at the size specified for "Attached Picture Size."

NOTE

- The attached image data is in a format that ordinary mail client software can read.
- When FTP Recording Function is set to ON, you cannot attach image(s) to a mail. However, the values you have set will be preserved.

5) Configure the "Attached Picture Size" setting

- ① Click ▼ for the "Attached Picture Size" setting in the right side of the window
 - ② Select an item from the pull-down menu
- Set the alarm and detected motion image size.

The following explains how to configure settings related to sending mail when the camera detects that the internal battery has run out of power.

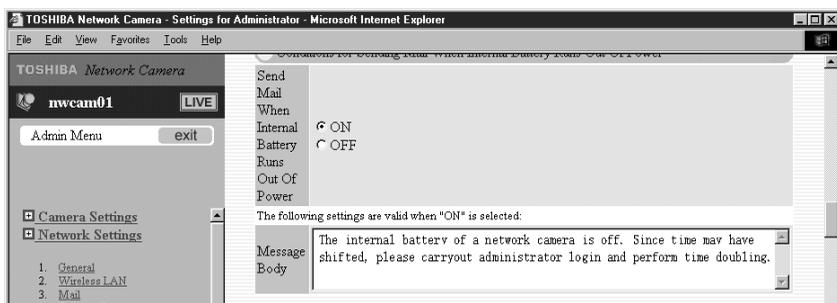
● Configuring the conditions for sending mail when the internal battery runs out of power

The internal battery may be out of power when the network camera is first unpacked after purchase or has been left unused with the power turned off for a while. Note that the network camera will no longer indicate the current time because the time and date are reset to their initial values when the internal battery runs out of power.

※If the time is not set correctly, the recording/playing functions may not work right. Be sure to set correct time.

1) Configure the "Conditions for Send Mail When Internal Battery Runs Out Of Power" setting

· Set the "Send Mail When Internal Battery Runs Out of Power" to "ON" or "OFF."



NOTE

- The default setting is "ON."

2) Enter the message body

· The text entered here becomes the body of messages.

The following explains how to configure settings related to sending mail when the IP address is changed.

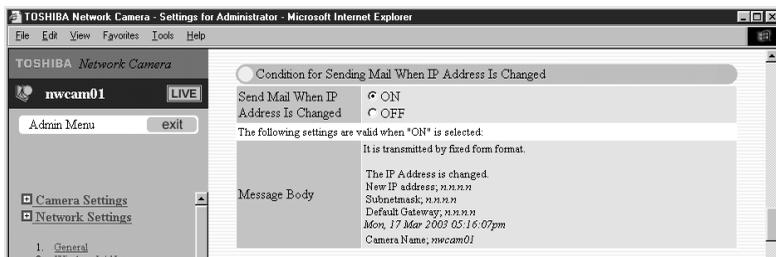
Configuring the Camera (Cont.)

- **Configuring the conditions for sending mail when the IP address is changed**

If the network camera is set to obtain an IP address automatically from the DHCP server, the IP address is changed when the power of the network camera is turned off or on, or periodically for security reasons. You can configure the network camera to send mail to inform you that the IP address has been changed.

Configure the "Condition for Sending Mail When IP Address Is Changed" setting

- Set the "Send Mail When IP Address Is Changed" to "ON" or "OFF." The default setting is "ON."



NOTE

- Mail is not sent if the mail settings (SMTP server information and administrator mail address) (→ page 80) have not been configured.
- The following fixed information are also added to the body of messages.
 - The new IP address
 - The subnet mask
 - The default gateway
 - The time and date
 - The camera name

● Configuring Mail Address Settings for Sending Mail

Enter mail addresses and select the conditions for sending mail.

1) Configure the "Address For Sending Mail" settings and "Address For Sending Mail (Copy)" settings

- Enter mail addresses and click the boxes beside each address to select the conditions for which mail is sent.

2) Press the button

- The settings are registered in the network cameras.

NOTE

- After setting sending mail setting and clicking  button, you may try "test." It is recommended to try the test to check your mail settings.

■ Configuring Privacy Mask Settings

You can configure the masking of camera images. Places with masking set are painted out in black.

This is a convenient feature for not showing certain places in images. For example, it allows you to hide the number plates of cars when the camera is installed in a garage or other location.

1) Perform administrator login (→ page 13)

- A window containing the Admin Menu appears.

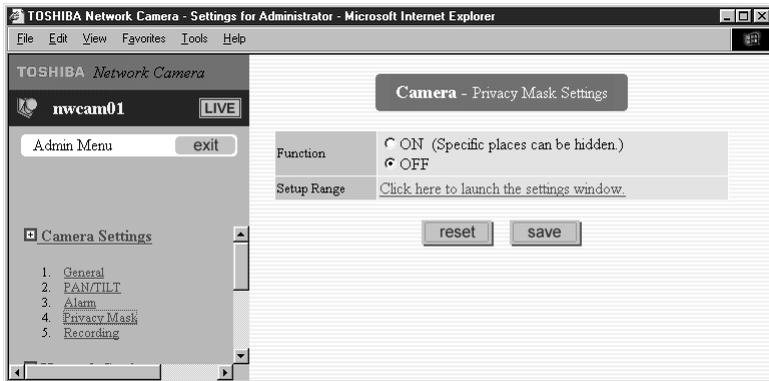
2) In the left side of the window, click the toggle (+) of "Camera Settings"

- The sub menus appear.

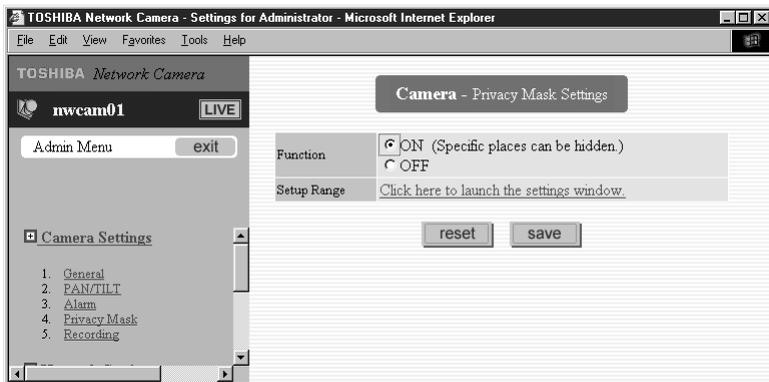
Configuring the Camera (Cont.)

3) From the list of sub menus, click "Privacy Mask"

- The settings appear in the right side of the window.



4) Set "Function" to "ON"



5) Use the "Setup Range" setting to specify the mask range

- For details on how to specify a range for the mask, see the explanation for the "Detection Range" setting in "Configuring Motion Sensor Settings" (→ page 76).

6) Click the **save** button below the settings

- The changes are saved.

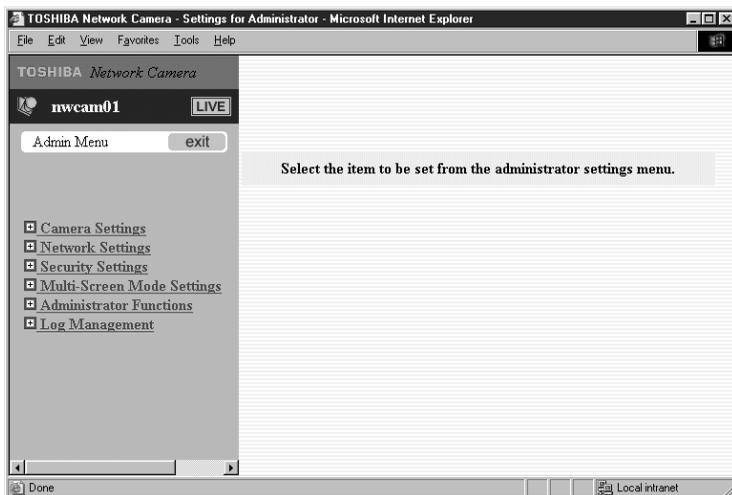
■ Freeze Activity Settings

When in "Auto Patrol" mode, the "Freeze Activity Function" allows you to view a still image while the lens is moving.

When you set this function to "ON", the screen shows the regular motion images when the lens is at the preset positions, and shows a still image (an image right before the lens moves) when the lens is moving.

1) Perform administrator login (→ page 13)

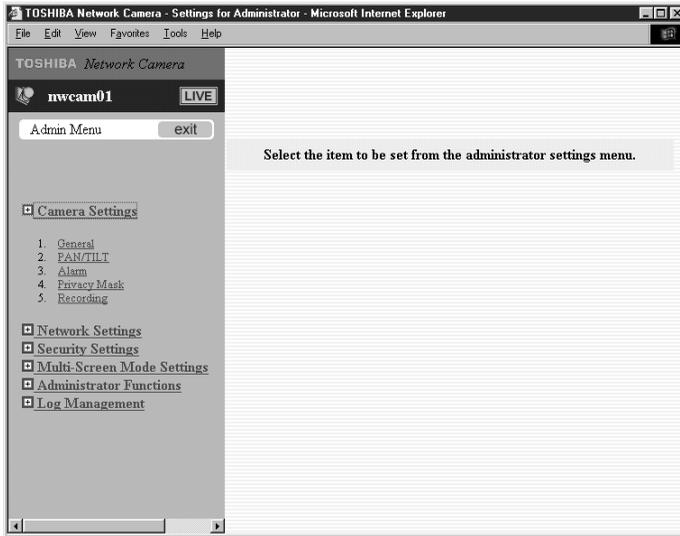
- A window containing the Admin Menu appears.



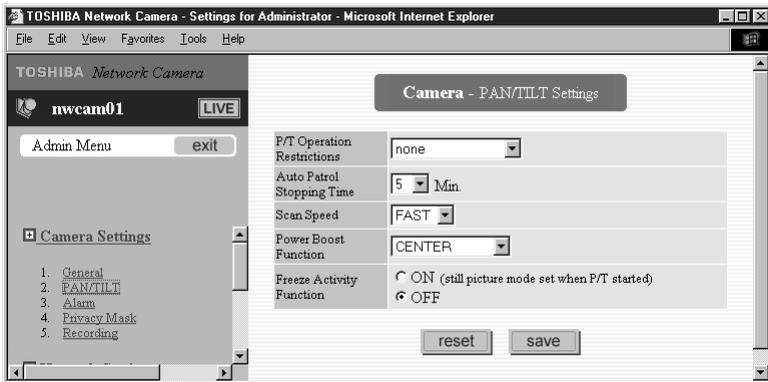
Configuring the Camera (Cont.)

2) In the left side of the window, click the toggle (+) of "Camera Settings"

- The sub menus appear.

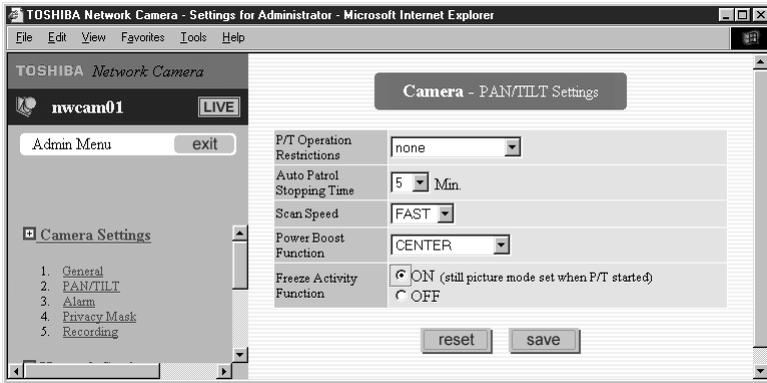


3) From the list of sub menus, click "PAN/TILT Settings"



- The settings appear in the right side of the window.

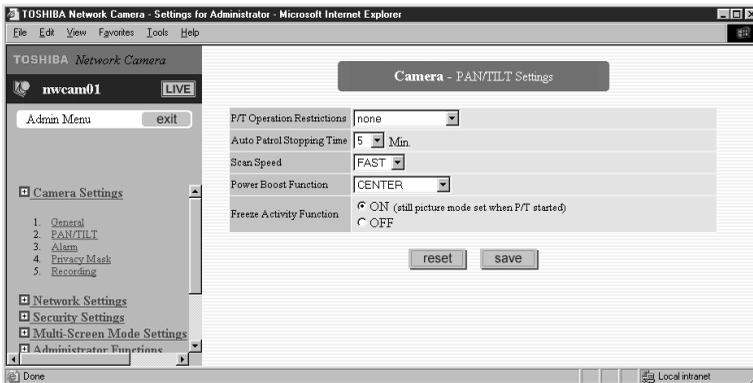
4) Set the "Freeze Activity Function" to "ON"



5) Set the "Auto Patrol Stopping Time" setting

- Select a time from 1, 2, 5, and 10 minutes.
- The period of time that the lens stops at the preset position is set.

6) Click the **save** button below the settings



- The changes are saved.

Setting Items

■ Camera Settings

1. General Settings

Item	IK-WB01A	IK-WB11A
Camera Picture Size	160 x 120 320 x 240 640 x 480 320 x 240 ZOOM 160 x 120 ZOOM	1280 x 960 800 x 600 640 x 480 320 x 240 160 x 120
Picture Quality	HIGH/MIDDLE/LOW	HIGH/MIDDLE/LOW
Frame Rate	HIGH/MIDDLE/LOW	HIGH/MIDDLE/LOW
Installation Environment	Desktop/Wall, Ceiling	Desktop/Wall, Ceiling
AE Compensation	-20 to 20	-20 to 20
Auto B/W	ON/OFF	ON/OFF
Shutter Speed	—	AES, 1/120, 1/60, 1/30, 1/20, 1/15, 1/8, 1/4, 1/2, 1, 2, 4
Auto Slow Shutter*1	—	ON/OFF
Auto Sensitivity Boost	—	ON/OFF
Sound Sensitivity	HIGH/LOW/STOP	HIGH/MIDDLE/LOW/STOP

※ 1: Auto-Slow shutter functions when the "shutter speed" is set "AES".

● Camera Picture Size :

Configures camera picture size. The bigger the size, the resolutions becomes higher.

IK-WB11A

Possible settings : 1280 × 960 / 800 × 600 / 640 × 480 /
320 × 240 / 160 × 120

IK-WB01A

Possible settings : 640 × 480 / 320 × 240 / 160 × 120 /
320 × 240 ZOOM / 160 × 120 ZOOM

The 320 × 240 ZOOM / 160 × 120 ZOOM settings enlarge the center part of an image (640 × 480) and display it on the screen.

● Picture Quality :

Configures the quality of camera images. When the picture sizes are the same, the file sizes change according to the each picture quality level.

HIGH : Better picture quality, but the file size becomes bigger.

MIDDLE : Standard quality and file size.

LOW : Lower picture quality, but the file size becomes smaller.

NOTE

- The picture quality and the file size change depending on the conditions of an object (splendor, resolution, movement).
- The smaller the file size, the network system will have less influence. As a result, frame rate (next page) may become higher.

● Frame Rate :

IK-WB11A

Configures the frame rate of the image data sending to the network (forwarding rate).

- HIGH : Higher frame rate.
- MIDDLE : Standard frame rate.
- LOW : Lower frame rate.

Actual frame rate changes depending on image size and setting environment (use of network cable, performance of a PC, etc...). The maximum frame rate for HIGH setting are:

- 30 fps (320 × 240, 160 × 120)
- 7.5 fps (1280 × 960, 800 × 600, 640 × 480)

The numbers in parentheses are the sizes of camera images.

※ The frame rate may get lowered when the slow shutter function and SD memory card are in use.

IK-WB01A

Configures the frame rate of the camera. The higher the frame rate, the renewal speed of the single-view or multi-view mode screen becomes faster.

The lower the frame rate, sensitivity of the camera heightens.

- HIGH : 15 fps
- MIDDLE : 10 fps
- LOW : 5 fps
- fps : frame / second

Actual frame rate changes depending on picture size and setting environment (use of network cable, performance of a PC, etc...). The maximum frame rate for HIGH setting are:

- HIGH : 15fps (320 × 240 ZOOM, 160 × 120 ZOOM)
7.5fps (640 × 480, 320 × 240, 160 × 120)
- MIDDLE : 10fps (320 × 240 ZOOM, 160 × 120 ZOOM)
5fps (640 × 480, 320 × 240, 160 × 120)
- LOW : 5fps (320 × 240 ZOOM, 160 × 120 ZOOM)
2.5fps (640 × 480, 320 × 240, 160 × 120)

The numbers in parentheses are the setting sizes of camera images.

NOTE

- When using the camera at night, or installing the camera where the camera cannot get enough light, try setting lower frame rate to heighten the sensitivity of the camera.(IK-WB01A)
- When monitoring something very bright, like sunlight, you might see stripe patterns (called "smear") on the screen. If something like this happens, setting frame rate to "LOW" might help.

Setting Items (Cont.)

● Installation Environment:

Turning the image (180°) depending on the installation environment.

Desktop/Wall : Will not rotate the image when installing the camera on a desk or a wall.

Ceiling : Rotates the image 180° when hanging the camera from a ceiling.

※The images will not rotate when capture an image with 1 shot function. (IK-WB01A)

● AE Compensation :

The camera adjusts the brightness of the image automatically. Adjust to the best splendor for each conditions of an object.

You can adjust the brightness between the range of -20 to 20. The bigger the number, picture becomes lighter, and the smaller the number, it becomes darker.

● Auto B/W :

Configures Auto B/W function. Auto B/W is the function that when monitored object becomes darker, it turns the image into black and white picture and helps the sensitivity of the camera to have better image. When the image turns to black and white, the image may have some noise.

ON : Auto B/W takes action.

OFF : Auto B/W does not take action.

● Shutter Speed (IK-WB11A):

Configures the speed of electronic shutter. When setting the Shutter Speed to "AES(Automatic Electronic Shutter)," the camera automatically sets the shutter speed depending on the brightness of an object.

Possible settings: AES, 1/120, 1/60, 1/30, 1/20, 1/15, 1/8, 1/4, 1/2, 1, 2, 4

NOTE

- When the shutter speed is set "AES," it automatically switches ND filter ON/OFF.
- The images may become rough when switching ND filter ON/OFF.

When you set the shutter speed other than "AES," the ND filter*1 will not be ON automatically. Because of this, smear*2 may shows up on the screen more often.

*1 ND filter : A filter which controls light intensity.

*2 Smear : A phenomena that stripe patterns show up on the screen from top to bottom toward the bright light.

● Auto Slow Shutter(IK-WB11A):

Configures Auto Slow Shutter. When setting auto slow shutter to "ON" and the shutter speed to "AES," the slow shutter functions depending on the brightness of an object.

ON : The slow shutter takes action.

OFF : The slow shutter does not take action.

● Auto Sensitivity Boost (IK-WB11A):

Configures Auto Sensitivity Boost function. Auto sensitivity boost function boosts up the sensitivity of the camera when an object gets darker. The screen may have more noises and resolution may get lowered when the image gets darker.

ON : The auto sensitivity boost takes action.

OFF : The auto sensitivity boost does not take action.

● Sound Sensitivity:

Configures the sensitivity of microphone (sound). Change the settings depending on installation environment.

IK-WB11A

HIGH : Heightens the sensitivity of sound input.

MIDDLE : Standard sound input sensitivity.

LOW : Lowers the sensitivity of sound input.

STOP : Disables sound function.

IK-WB01A

HIGH : Heightens the sensitivity of a microphone (sound).

LOW : Lowers the sensitivity of a microphone (sound).

STOP : Disables sound function.

2. PAN/TILT Settings

Item	IK-WB01A	IK-WB11A
P/T Operation Restrictions	None/Administrator Only	None/Administrator Only
Auto Patrol Stopping Time	1, 2, 5, 10 minutes	1, 2, 5, 10 minutes
Scan Speed	FAST/SLOW	FAST/SLOW
Power Boost Function	CENTER, HOME, AUTO SCAN, AUTO PATROL	CENTER, HOME, AUTO SCAN, AUTO PATROL
Freeze Activity Function	ON/OFF	ON/OFF

Setting Items (Cont.)

3. Alarm Settings

1) External Alarm

Item	IK-WB01A	IK-WB11A
Function	ON/OFF	ON/OFF
Input Type	Normal Closed (NC)/ Normal Opened (NO)	Normal Closed (NC)/ Normal Opened (NO)
Associate to P/T Operation	OFF, Preset, Auto Patrol	OFF, Preset, Auto Patrol
Preset No.	1 to 10	1 to 10
Resume Function	ON/OFF	ON/OFF
Resume Time	10, 30, 60 seconds	10, 30, 60 seconds

2) Motion Sensor

Item	IK-WB01A	IK-WB11A
Function	—	ON/OFF
Sensitivity	—	HIGH, MIDDLE, LOW
Size	—	LARGE, MEDIUM, SMALL
Detection Range	—	Set from screen ranges of 8X8 squares
Associate to P/T Operation	—	OFF, Preset, Auto Patrol
Preset No	—	1 to 10
Resume Function	—	ON/OFF
Resume Time	—	10, 30, 60 seconds

※ Depending on what the camera is monitoring, the sensor may not work properly.

3) Alarm Output

Item	IK-WB01A	IK-WB11A
Output Hold Time	1, 5, 10, 15, 30, 60 seconds	1, 5, 10, 15, 30, 60 seconds

4. Privacy Mask Settings

Item	IK-WB01A	IK-WB11A
Function	—	ON/OFF
Setup Range	—	Set from screen ranges of 8 x 8 squares

※ This is an easy image masking function. Depending on angles/movement of PAN/TILT function, the masking positions may shift.

5. Recording Settings

1) Alarm Recording

Item	IK-WB01A	IK-WB11A
External Alarm	ON/OFF	ON/OFF
Motion Sensor	—	ON/OFF
Pre-Recording	0, 3, 5, 10 frames	0, 3, 5, 10 frames
Post-Recording	0, 3, 5, 10, 20 frames	0, 3, 5, 10, 20 frames
Recording Cycle* ¹	1, 2, 5, 10 seconds	1* ² , 2, 5, 10 seconds

*¹ The camera records only one image of the moment alarm has generated when "Pre-Recording" and "Post-Recording" are set to "0 frame."

*² You can record Alarm(s) in 1-second cycle when picture size is set to 160x120, 320x240 or 640x480.

2) Normal Recording (Only Possible when SD Memory Card Inserted)

Item	IK-WB01A	IK-WB11A
Function	—	ON/OFF
Recording Cycle*	—	1, 2, 5, 10, 30, 60, 120, 180 seconds
Timer Association	—	ON/OFF

* Image can be recorded with 1 second-recording cycle when picture sizes are 160 × 120, 320 × 240, 640 × 480; 2 seconds-recorded cycle when picture sizes are 800 × 600, 1280 × 960.

* The frame rate (renewal speed) may become slower when recording images.

* Actual Recording Cycle may differ from your setting when the slow shutter is in use.

3) Timer Recording

Item	IK-WB01A	IK-WB11A
Time Setting	—	Start: 0 to 23 Stop: 0 to 23

4) Overwriting

Item	IK-WB01A	IK-WB11A
Function	—	ON/OFF

* If you'd like to use this function, use SD memory card bigger than 128MB. Otherwise, it may shorten the life of SD memory card.

* When playing the recorded images from SD memory card, you cannot record any images on the card.

* If an SD memory card is used to record both alarm recordings and normal recordings, thirty percent of the total storage space is used for alarm recordings and the rest is used for normal recordings.

* The camera will not record any images when deleting images in the SD memory card.

* The frame rate may become slower when deleting images in the SD memory card.

* When either Alarm recording or Normal recording becomes full even if there are some more spaces in the SD memory card, the camera notifies you that the card is "full."

Setting Items (Cont.)

5) SD Memory Card Formatting

Item	IK-WB01A	IK-WB11A
Function	—	Button Selection

* When SD memory card formatting completes, the completion notice will be shown. When you perform formatting, make sure to check the setting screen until the notice is shown.

■ Network Settings

1. Network Connection Settings

1) General Settings

Item	IK-WB01A	IK-WB11A
Camera Name	Enter up to 32 single-byte characters	Enter up to 32 single-byte characters
Auto Identification of Other Cameras	ON/OFF	ON/OFF
DHCP	ON/OFF	ON/OFF
IP Address	Enter the static IP address	Enter the static IP address
Subnet Mask	Enter the subnet mask	Enter the subnet mask
Default Gateway	Enter the default gateway	Enter the default gateway

2) DNS Settings

Item	IK-WB01A	IK-WB11A
Primary DNS Server IP Address	Enter the IP address	Enter the IP address
Secondary DNS Server IP Address	Enter the IP address	Enter the IP address

3) HTTP Port Setting

Item	IK-WB01A	IK-WB11A
HTTP Port No.	Enter the port number	Enter the port number

4) Camera ID

Item	IK-WB01A	IK-WB11A
Camera ID	Cannot be changed	Cannot be changed

2. Wireless LAN Settings

Item	IK-WB01A	IK-WB11A
COM Mode	Infrastructure, adhoc	Infrastructure, adhoc
COM Channel	1 to 11	1 to 11
ESS-ID	Enter up to 32 single-byte characters	Enter up to 32 single-byte characters
COM Speed	Auto, 11, 5.5, 2.0, 1.0 Mbps	Auto, 11, 5.5, 2.0, 1.0 Mbps
Encryption	Off, 64 bit WEP, 128 bit WEP	Off, 64 bit WEP, 128 bit WEP
WEP Key Type	16 hexadecimal, ASCII text	16 hexadecimal, ASCII text
WEP Key	64 bit: 10 characters (hexadecimal digits), 5 characters (ASCII text) 128 bit: 26 characters (hexadecimal digits), 13 characters (ASCII text)	64 bit: 10 characters (hexadecimal digits), 5 characters (ASCII text) 128 bit: 26 characters (hexadecimal digits), 13 characters (ASCII text)

3. Mail Settings

1) Server Settings

Item	IK-WB01A	IK-WB11A
SMTP Server Name	Enter the server name	Enter the server name
SMTP IP Address	Enter the IP address	Enter the IP address
POP3 Server Name	Enter the server name	Enter the server name
POP3 IP Address	Enter the IP address	Enter the IP address

2) Verification Settings

Item	IK-WB01A	IK-WB11A
User ID	Enter the user ID	Enter the user ID
Password	Enter the password	Enter the password
Password (Confirm)	Reenter the password	Reenter the password

3) Administrator Mail Settings

Item	IK-WB01A	IK-WB11A
Mail Address	Enter the mail address	Enter the mail address
Subject of Sent Messages	Enter up to 128 single-byte characters	Enter up to 128 single-byte characters

4) Conditions for Sending Mail when An External Alarm Goes Off

Item	IK-WB01A	IK-WB11A
Send Mail When An External Alarm Goes Off	ON/OFF	ON/OFF
Message Body	Enter up to 256 single-byte characters	Enter up to 256 single-byte characters
Attach Alarm Picture To Mail	ON/OFF	ON/OFF

Setting Items (Cont.)

5) Conditions for Sending Mail When Motion is Detected

Item	IK-WB01A	IK-WB11A
Conditions for Sending Mail When Motion is Detected	—	ON/OFF
Message Body	—	Enter up to 256 single-byte characters
Attach Motion Picture To Mail	—	ON/OFF

6) Attached Picture Size Setting

Item	IK-WB01A	IK-WB11A
Attached Picture Size	640 x 480 320 x 240 160 x 120	1280 x 960 800 x 600 640 x 480 320 x 240 160 x 120

* When FTP Recording Function is set to ON, you cannot attach image(s) to a mail.

7) Conditions for Sending Mail when Internal Battery Runs Out Of Power

Item	IK-WB01A	IK-WB11A
Send Mail When Internal Battery Runs out	ON/OFF	ON/OFF
Out Of Power Message Body	Enter up to 256 single-byte characters	Enter up to 256 single-byte characters

8) Conditions for Sending Mail When IP Address Is Changed

Item	IK-WB01A	IK-WB11A
Send Mail When IP Address is Changed	ON/OFF	ON/OFF
Message Body	The IP address is changed. New IP address: *** Subnet mask: *** Default gateway: *** Day, month, year, time Camera Name: ***	The IP address is changed. New IP address: *** Subnet mask: *** Default gateway: *** Day, month, year, time Camera Name: ***

9) Addresses for Sending Mail (To)

Item	IK-WB01A	IK-WB11A
Input fields for up to 10 addresses (To)	<ul style="list-style-type: none"> · Enter the mail addresses · For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed 	<ul style="list-style-type: none"> · Enter the mail addresses · For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed

10) Addresses for Sending Mail (Cc)

Item	IK-WB01A	IK-WB11A
Input fields for up to 10 addresses (Cc)	<ul style="list-style-type: none"> · Enter mail addresses · For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed 	<ul style="list-style-type: none"> · Enter mail addresses · For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed

4. Routing Table Settings

Item	IK-WB01A	IK-WB11A
Static Routing Table Settings	Configure the following settings for up to ten entries: destination address, subnet mask, gateway address, and metric	Configure the following settings for up to ten entries: destination address, subnet mask, gateway address, and metric

5. ARP Table Settings

1) Static ARP Table Settings

Item	IK-WB01A	IK-WB11A
Static ARP Table Settings	Configure the following settings for up to ten entries: IP address, MAC address	Configure the following settings for up to ten entries: IP address, MAC address

Setting Items (Cont.)

2) Browse ARP Table

Item	IK-WB01A	IK-WB11A
ARP Table	List of ARP displayed	List of ARP displayed

* Clicking the button deletes the contents of the ARP table.

6. DDNS Settings

Item	IK-WB01A	IK-WB11A
DDNS	ON/OFF	ON/OFF
DDNS User Name	Enter the user name	Enter the user name
DDNS Password	Enter the password	Enter the password
DDNS Server	Enter the server name	Enter the server name

7. FTP Recording Settings

1) Image Recording by FTP

Item	IK-WB01A	IK-WB11A
Image Recording by FTP	Periodic Recording by Schedule/ When Alarm goes off/ OFF	Periodic recording by Schedule/ When Alarm goes off (Selection of External Alarm and Motion Detection)/ OFF

2) FTP Server Setup

Item	IK-WB01A	IK-WB11A
Server Name	Enter the server name	Enter the server name
IP Address	Enter the IP address	Enter the IP address
User ID	Enter the User ID	Enter the User ID
Password	Enter the password	Enter the password
Password (Confirm)	Reenter the password	Reenter the password
FTP Port Number	21	21
FTP Mode	PORT/PASV	PORT/PASV
Connection to FTP Server	Stay connected/ Re-connect	Stay connected/ Re-connect

3) Conditions for Image Recording by FTP

Item	IK-WB01A	IK-WB11A
Booting up Advanced Setting Window	Periodic Recording by Schedule/ When Alarm goes off	Periodic Recording by Schedule/ When Alarm goes off

Periodic Recording by Schedule

Item	IK-WB01A	IK-WB11A
Monday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Tuesday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Wednesday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Thursday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Friday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Saturday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Sunday	OFF/All Day/Timer Pattern 1/Timer Pattern 2	OFF/All Day/Timer Pattern 1/Timer Pattern 2
Timer Pattern 1	Starting Time : 0 am to 11 pm Ending Time : 0 am to 11 pm	Starting Time : 0 am to 11 pm Ending Time : 0 am to 11 pm
Timer Pattern 2	Starting Time : 0 am to 11 pm Ending Time : 0 am to 11 pm	Starting Time : 0 am to 11 pm Ending Time : 0 am to 11 pm
Recording Cycle	1,2,5,10,15,30,60,120, 300,600,900,1500, 3000 second(s)	1,2,5,10,15,30,60,120, 300,600,900,1500, 3000 second(s)
Recording File Name	Enter up to 16 characters*	Enter up to 16 characters*
Recording Directory on the FTP Server	Enter up to 128 characters	Enter up to 128 characters

* You cannot enter characters, \ / : ; , " | ? * < > .

When Alarm goes off

Item	IK-WB01A	IK-WB11A
Pre-Recording	0,1,2,5,10,30 frames, Max.	0,1,2,5,10,30 frames, Max.
Post-Recording	Enter frames between 0 to 1000	Enter frames between 0 to 1000
Recording Cycle	0.06, 0.1, 0.2, 0.5, 1, 2, 5, 10 seconds	0.03, 0.06, 0.1, 0.2, 0.5, 1, 2, 5, 10 seconds
Recording File Name	Enter up to 16 characters*	Enter up to 16 characters*
Recording Directory on the FTP Server	Enter up to 128 characters	Enter up to 128 characters

* You cannot enter characters, \ / : ; , " | ? * < > .

Setting Items (Cont.)

4) Conditions for the Image Accumulation Inside of the Camera

Item	IK-WB01A	IK-WB11A
Image Accumulation	—	ON/OFF
Image Accumulation Cycle	—	1*, 2, 5, 10, 15, 30, 60, 120, 300, 600, 900, 1800, 3600 seconds
Overwriting	—	ON/OFF

- * You can record images in 1-second cycle when picture size is set to 160x120, 320x240 or 640x480.
- * Alarm Recording and Normal Recording (IK-WB11A) functions will be invalidated.
- * You cannot attach images to E-mail(s).
- * You cannot use the controller's Alarm List and Record List (IK-WB11A) functions.
- * All the saved images of the Alarm List and the Record List (IK-WB11A) on the camera will be deleted.
- * SD Memory Card will be formatted automatically and all the data in the card will be deleted. (IK-WB11A)

■ Security Settings

1. Access Restriction Settings

Item	IK-WB01A	IK-WB11A
Restrict Access by IP Address	ON/OFF	ON/OFF
IP Address	Enter up to 20 IP addresses	Enter up to 20 IP addresses

2. Filtering Settings

Item	IK-WB01A	IK-WB11A
Filtering by MAC Address	ON/OFF	ON/OFF
MAC Address	Enter up to 20 MAC addresses	Enter up to 20 MAC addresses

3. User Restriction Settings

Item	IK-WB01A	IK-WB11A
User Restrictions	ON/OFF	ON/OFF
Login ID	Enter the login ID	Enter the login ID
Password	Enter the password	Enter the password
Password (Confirm)	Reenter the password	Reenter the password

■ Multi-screen Mode Settings

1. Adding and Removing Cameras

Item	IK-WB01A	IK-WB11A
List of Registered Cameras	Enter domain name (or the IP address) and HTTP port number	Enter domain name (or the IP address) and HTTP port number

2. Selecting Cameras

1) Switching to Multi-Screen Mode Setting

Item	IK-WB01A	IK-WB11A
Multi-Screen Mode	ON/OFF	ON/OFF

2) Selection of Cameras for Multi-screen Display

Item	IK-WB01A	IK-WB11A
Selection of Cameras for Multi-screen Display	Select cameras that were registered by searching automatically or by using the administrator function for adding cameras	Select cameras that were registered by searching automatically or by using the administrator function for adding cameras

■ Administrator Functions

1. Changing the Password

Item	IK-WB01A	IK-WB11A
Current Login ID	Enter the current login ID	Enter the current login ID
Current Password	Enter the current password	Enter the current password
New Login ID	Enter the new login ID	Enter the new login ID
New Password	Enter the new password	Enter the new password
New Password (Confirm)	Reenter the password	Reenter the password

2. Setting the Time

1) Time Zone

Item	IK-WB01A	IK-WB11A
Time Zone	GMT-12:00~GMT+12:00	GMT-12:00~GMT+12:00

2) Changing the Time Manually

Item	IK-WB01A	IK-WB11A
Date	Select a date from the date boxes	Select a date from the date boxes
Time	Select a time from the time boxes	Select a time from the time boxes

Setting Items (Cont.)

3) Changing the Time Using an NTP Server Setting

Item	IK-WB01A	IK-WB11A
Function	ON/OFF	ON/OFF
NTP Server Host Name	Enter the host name	Enter the host name
IP Address for an NTP Server	Enter the IP address	Enter the IP address

4) Quick Time Setting

5) Daylight saving setting

Item	IK-WB01A	IK-WB11A
Daylight saving	Valid, Invalid	Valid, Invalid

※ The camera will not record normal images between 1:00AM to 2:00AM (Summer Time) on the last Sunday of October. However, it will record normal images between 1:00AM to 2:00AM (regular time) on the last Sunday of October only if the Normal Recording function is set to "ON".

※ You cannot set the time (between 2:00AM to 3:00AM on the first Sunday of April.) manually if the Daylight saving is set to "valid."

3. Firmware Update

Item	IK-WB01A	IK-WB11A
File Name	Download the firmware. Then, select the file by entering the file path or browsing	Download the firmware. Then, select the file by entering the file path or browsing

■ Log Management

1. Forwarding Settings

Item	IK-WB01A	IK-WB11A
Forward Log to Another Server	ON/OFF	ON/OFF
Name of Destination Server	Enter the server name	Enter the server name
IP Address of Destination Server	Enter the IP address	Enter the IP address

2. Browse and Delete Settings

Item	IK-WB01A	IK-WB11A
Log List	The list of logs is displayed	The list of logs is displayed

* Clicking the button deletes the logs.

Returning to the Default Settings

Follow the procedure below to return to the default settings.

- **Return to the defaults settings by using a thin, pointed object to press the reset button, shown in the figure on page 14, 15 in Basic User's Guide, for at least 5 seconds.**
 - The settings return to the defaults.
 - The following shows the default settings.

NOTE

- Pressing the reset button for less than a second switches ON/OFF of the video output. This function, the video output, is only for checking images on the screen when installing the camera.
At this moment, the camera stops image recordings and sending images and sound to the network.

Returning to the Default Settings (Cont.)

Default Settings

■ Camera Settings

Item	IK-WB01A	IK-WB11A	
General Settings			
Camera Picture Size	640X480	640X480	
Picture Quality	MIDDLE	MIDDLE	
Frame Rate	HIGH	HIGH	
Installation Environment	Desktop/Wall	Desktop/Wall	
AE Compensation	0	0	
Auto B/W	OFF	OFF	
Shutter Speed	—	AES	
Auto Slow Shutter	—	OFF	
Auto Sensitivity Boost	—	OFF	
Sound Sensitivity	HIGH	MIDDLE	
Pan/Tilt Settings			
P/T Operation Restrictions	None	None	
Auto Patrol Stopping Time	5 minutes	5 minutes	
Scan Speed	FAST	FAST	
Power Boost Function	CENTER	CENTER	
Freeze Activity Function	OFF	OFF	
Alarm Settings			
External Alarm	Function	OFF	OFF
	Input Type	Normal Open (NO)	Normal Open (NO)
	Associate to P/T Operation	OFF	OFF
	Preset No.	1 (This setting is only valid when 'Associate to P/T operation' is set to 'Preset')	1 (This setting is only valid when 'Associate to P/T operation' is set to 'Preset')
	Resume Function	OFF	OFF
Motion Sensor	Resume Time	30 seconds	30 seconds
	Function	—	OFF
	Sensitivity	—	LOW
	Size	—	Large
	Detection Range	—	All OFF
	Associate to P/T Operation	—	OFF
	Preset No.	—	1 (This setting is only valid when 'Associate to P/T operation' is set to 'Preset')
	Resume Function	—	OFF
Resume Time	—	30 seconds	

Item		IK-WB01A	IK-WB11A
Alarm Output	Output Hold Time	5 seconds	5 seconds
Privacy Mask Settings			
Function		—	OFF
Setup Range		—	All OFF
Recording Function Settings			
Alarm Recording	External Alarm	OFF	OFF
	Motion Sensor	—	OFF
	Pre-Recording	10 frames	10 frames
	Post-Recording	10 frames	10 frames
	Recording Cycle	2 seconds	2 seconds
Normal Recording	Function	—	OFF
	Recording Cycle	—	60 seconds
	Timer Association	—	OFF
Time Recording	Time Setting	—	Start: 8 O'clock, Stop: 17 O'clock
Over Writing	Function	—	OFF
SD Memory Card Formatting		—	Click on the Format button to format.

■ Network Settings

Item		IK-WB01A	IK-WB11A
Network Connection			
General Settings	Camera Name	nwcam01	nwcam01
	Auto Identification of Other Cameras	OFF	OFF
	DHCP	ON	ON
	IP Address	192.168.0.30 (This setting is only valid when 'DHCP' is set to 'OFF')	192.168.0.30 (This setting is only valid when 'DHCP' is set to 'OFF')
	Subnet Mask	255.255.255.0 (This setting is only valid when 'DHCP' is set to 'OFF')	255.255.255.0 (This setting is only valid when 'DHCP' is set to 'OFF')
	Default Gateway		
DNS Settings	Primary DNS Server IP Address		
	Secondary DNS Server IP Address		
Http Port Setting.	Http Port No.	80	80
Camera ID	Camera ID	Each product has different number.	Each product has different number.
Wireless LAN Settings			
Communication Mode		adhoc	adhoc
Communication Channel		10	10
ESS-ID		ikwb	ikwb
Communication Speed		Auto	Auto
Encryption		Off	Off
WEP Key		ASCII text (This setting is only valid when 'Encryption' is not set to 'Off')	ASCII text (This setting is only valid when 'Encryption' is not set to 'Off')

Returning to the Default Settings (Cont.)

Introduction

Viewing • Listening
and Operation

Recording

Set up

Others

Item		IK-WB01A	IK-WB11A
Mail Settings			
Server Settings	SMTP Server Name		
	SMTP IP Address		
	POP3 Server Name		
	POP3 IP Address		
Verification Settings	User ID		
	Password		
	Password (Confirm)		
Administrator Mail Settings	Mail Address		
	Subject of Sent Messages	TOSHIBA Network Camera	TOSHIBA Network Camera
Conditions for Sending Mails when an External Alarm Goes Off	Send Mail When an External Alarm Goes Off	OFF	OFF
	Message Body	External Alarm Detection	External Alarm Detection
	Attach Alarm Picture to Mail	OFF	OFF
Conditions for Sending Mail when Motion is Detected	Conditions for Sending Mail when Motion is Detected	—	OFF
	Message Body	—	Motion Detection
	Attach Motion Picture to Mail	—	OFF
Attached Picture Size Setting	Attached Picture Size	640X480	640X480
Conditions for Sending Mail when Internal Battery Runs Out of Power	Send Mail when Internal Battery Runs Out of Power	ON	ON
	Message Body	The internal battery of a network camera is off. Since time may have shifted, please carry out administrator login and perform time doubling	The internal battery of a network camera is off. Since time may have shifted, please carry out administrator login and perform time doubling
Condition for Sending Mail when IP Address is Changed	Send Mail when IP Address is Changed	ON	ON
	Message Body	The IP address is changed. New IP address: *** Subnet mask: *** Default gateway: *** Year, month, and day Camera name: ***	The IP address is changed. New IP address: *** Subnet mask: *** Default gateway: *** Year, month, and day Camera name: ***
Addresses for Sending Mail	Input fields for up to 10 addresses (To)		
	Input fields for up to 10 addresses (Cc)		

Item	IK-WB01A	IK-WB11A	
Routing Table Settings			
Destination Address			
Subnet Mask			
Gateway Address			
Metric	1	1	
ARP Table Settings			
IP Address			
MAC Address			
Static ARP Table Settings	Brows ARP table	Brows ARP table	
Browse ARP Table	This changes depending on communication status	This changes depending on communication status	
DDNS Settings			
Use DDNS	OFF	OFF	
DDNS User Name			
DDNS Password			
DDNS Server	www.netcam.zaantek.net	www.netcam.zaantek.net	
FTP Recording Settings			
Image Recording by FTP	Image Recording by FTP	OFF	OFF
FTP Server Setup	FTP Server		
	IP Address		
	User ID		
	Password		
	Password (Confirm)		
	FTP Port Number	21	21
	FTP Mode	PORT	PORT
Connection to FTP Server	Re-connect	Re-connect	

Returning to the Default Settings (Cont.)

Item		IK-WB01A	IK-WB11A
Conditions for Image Recording by FTP (Periodic Recording by Schedule)	Monday	OFF	OFF
	Tuesday	OFF	OFF
	Wednesday	OFF	OFF
	Thursday	OFF	OFF
	Friday	OFF	OFF
	Saturday	OFF	OFF
	Sunday	OFF	OFF
	Timer Pattern 1	Start: 8am Stop: 5pm	Start: 8am Stop: 5pm
	Timer Pattern 2	Start: 8am Stop: 5pm	Start: 8am Stop: 5pm
	Recording Cycle	1 second	1 second
Recording File Name			
Recording Directory on the FTP Server			
Conditions for Image Recording by FTP (When Alarm goes off)	Pre-Recording	10 frames	10 frames
	Post-Recording	100 frames	100 frames
	Recording Cycle	1 second	1 second
	Recording File Name		
	Recording Directory on the FTP Server		
Conditions for the Image Accumulation Inside of the Camera	Image Accumulation	—	OFF
	Image Accumulation Cycle	—	60 seconds
	Over Writing	—	OFF

■ Security Settings

Item	IK-WB01A	IK-WB11A
Access Restriction Settings		
Restrict Access by IP Address	OFF	OFF
IP Address		
Filtering Settings		
Filtering by MAC Address	OFF	OFF
MAC Address		
User Restriction Settings		
User Restrictions	OFF	OFF
Login ID	guest	guest
Password	guest	guest
Password (Confirm)	guest	guest

■ Multi-screen Mode Settings

Item	IK-WB01A	IK-WB11A
Adding and Removing Cameras		
Camera Name Entry		
Selection of Cameras		
Switching to Multi-screen Display Settings	OFF	OFF
Selection of Cameras for Multi-screen Display		

■ Administrator Functions

Item	IK-WB01A	IK-WB11A
Changing the Password		
Current Login ID		
Current Password		
New Login ID		
New Password		
New Password (Confirm)		
Setting the Time		
Time Zone	GMT-12:00~GMT+12:00	GMT-12:00~GMT+12:00
Changing the Time Manually	Date	The date currently set
	Time	The time currently set
Changing the Time Using an NTP Server Setting	Function	OFF
	NTP Server Host Name	
	IP Address for an NTP Server	
Daylight Saving Setting	valid	valid
Firmware Update		
File Name		

■ Log Management

Item	IK-WB01A	IK-WB11A
Forwarding Settings		
Forward Log to Another Server	OFF	OFF
Name of Destination Server		
IP Address of Destination Server		
Browse and Delete Settings		
Log List	This changes depending on camera operation status	This changes depending on camera operation status

Updating the Firmware

Follow the procedure below to update the firmware.

Initial Procedure

- Create a folder in which to save the latest firmware.
- Access the following Toshiba Web page via the Internet.

URL: <http://www.toshiba.com/taisisd>

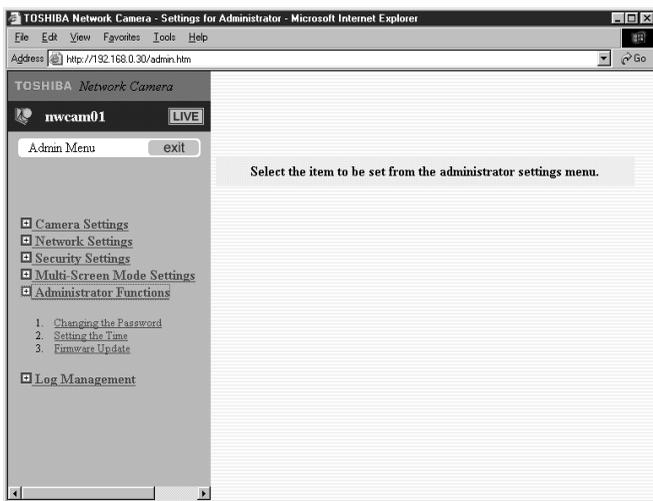
Download the latest firmware according to the explanation on the Web page.

1 Perform administrator login

- For details on how to login, refer to page 13.

2 In the Admin menu, click the toggle (+) of Administrator Functions

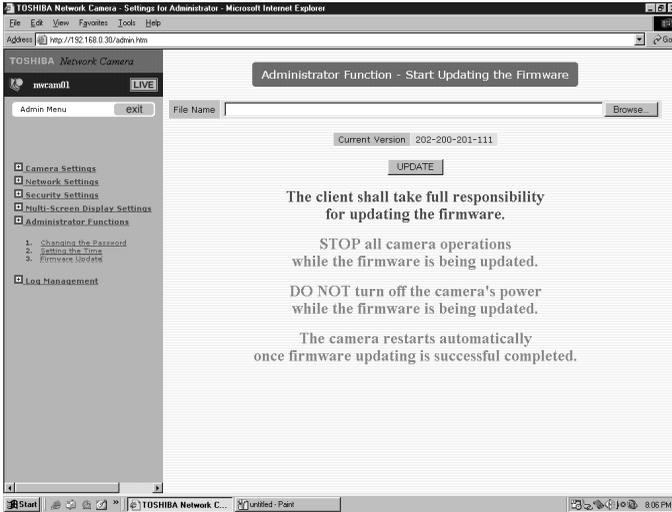
- The sub menus appear.



3

Click "Firmware Update"

· The following screen appears.



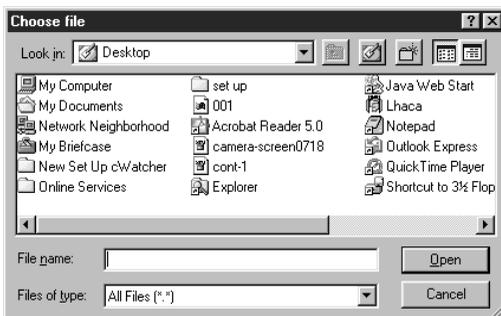
NOTE

- The version numbers are indicated with four 3-digit numbers. The last 3-digit numbers indicates a model type.
IK-WB01A Model...nnn-nnn-nnn-001
IK-WB11A Model...nnn-nnn-nnn-011

4

Click **Browse...**

· The following screen appears.



5

Select the latest firmware file that was saved in the folder created in the section "Initial Procedure."

· The name of the selected file appears in the screen shown in Step 3.

Updating the Firmware (Cont.)

6 Click **UPDATE** in the screen shown in Step 3

- The firmware update begins.
- After a while, the firmware update finishes and the camera restarts automatically.

Important

- Updating the firmware is the responsibility of the customer.
- The camera stops moving during the firmware update.
- Do not turn off the power of the camera during the firmware updating. It causes failure in updating firmware.

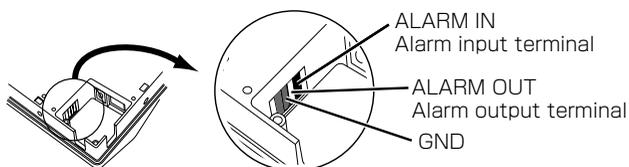
Others

- Alarm Terminals
- Glossary (Index)
- Errors and Messages
- Before Calling Service Personnel...
- Specifications
- Appearance Diagram (IK-WB01A)
- Appearance Diagram (IK-WB11A)

Alarm Terminals

You can connect a variety of sensors to the camera by using alarm terminals. See following table for functions of each terminal.

Name	Function	Description
ALARM IN	Alarm Input	· Inputs External Alarm signal. You can choose the type of input signal: Normal Opened (NO) or Normal Closed (NC). Connect a sensor or other devices to the camera.
ALARM OUT	Alarm Output	· Outputs open corrector. Max.DC 24V, 50mA. Output holding time follows the those of Alarm Settings/Alarm Output. (→page 94)
GND	GND	GND for a signal



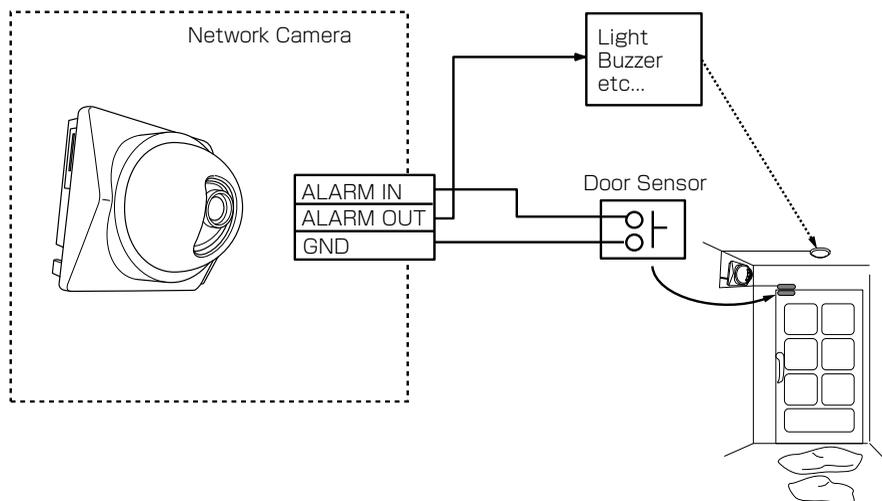
■ Connecting External Alarm Devices to the Alarm Input/Output Terminals

- Be sure to connect cables of external alarm devices before connecting AC adaptor cable and LAN cable to the camera.
- When you place IK-WB11A outside, be sure to waterproof the devices and cables just like the power cord and LAN cable by using conduit pipes or the like.

Specifications of Alarm Signals

Name	Internal Circuit	Signal Condition
Alarm Input	<p>DC3.3V 47kΩ 220Ω To CMOS input Inside the Camera</p>	<p>Non-Voltage point signal, CMOS 3.3V-GND signal inputs</p> <p>Normal Opened</p> <p>Normal Closed</p>
Alarm Output	<p>220Ω To CMOS Output Inside the Camera</p>	Max. DC24V, 50mA

Example Circuit Connection



Glossary (Index)

※ BUG: Basic User's Guide

Number

- 1 shot 22
This function captures an image as JPEG file. You can operate this function from the controller, and the image is displayed in the browser for 1 Shot.

A

- AC adaptor 9
Accessories 4
Access restriction settings 102
Access Point 66
A device which connects PCs and wireless devices to each other in the wireless environment, and perform common files through wireless connection.
Adhoc method BUG25
Adhoc method is one of the components of wireless LAN networking. Used when networking without access point or a wireless router.
Administrator 12
Admin menu 14
AE compensation 92
Compensation for Automatic Exposure of the camera.
ALARM IN/OUT
(Alarm input/output terminal) 116
Alarm output holding time 94
Alarm list 31
ARP table 99
ARP is a shortened form of Address Resolution Protocol. It is the table to calculate MAC address from IP address on the TCP/IP protocol.
ASCII Text 68
ASCII(American Standard Code for Information Interchange)
Attaching picture to mail 82
Auto B/W 92
Auto Patrol 22
The camera can register max of 10 presets of the lens directions. This function patrols these preset positions in fixed time intervals.

- Auto sensitivity boost 93
Auto Slow Shutter 93

B

- Before calling service personnel 128
Browser 13
Software to view WEB screens.
There are browser of Microsoft®'s Internet Explorer™ and Netscape™ Communications's Netscape™ Navigator.

C

- Camera ID 96
Camera searching application
"Camera Finder" BUG34
Camera name 15, 19
Changing password
(administrator) BUG39
COM channel 67
When dividing usable frequency band in wireless LAN communication, you can have individual communication. Each divided frequency band is called channel. (11 channels in total)
COM speed 67
The product supports 10/100Mbps when using wired LAN. When using wireless LAN, the product supports 11/5.5/2/1Mbps which standardized by IEEE802.11b, and automatically decides communication speed.
Connection BUG24-26
Controller 21,40
Camera controlling browser is called controller. Administrator's controller and user's controller are very different in functions. Administrator controller has basic, preset, alarm list, and recording (IK-WB1 1A only) controllers, but these are easily switch to one another with one touch.
Crossover cable BUG24
One of the Ethernet cables made to connect 2 PCs without using hub or router.

D

DC IN (Power input terminal)	BUG15
DDNS	100
(Dynamic Domain Name System)	
This is the technique to overwrite the information of DNS (Domain Name System) server dynamically and forward only different informations between DNS servers. Because of this, it enables to reduce forwarding data which are needed to renew information of DNS server, and reduce overhead of the network. If this combines with DHCP (Dynamic Host Configuration Protocol), it is possible to assign IP address and host name right away as the host on the LAN changes.	
Default gateway	65
Network devices cannot communicate directly with devices in other networks. In this case, communication becomes possible by using devices like router. Generally, when communicating with other networks, you set the sending destination to that router.	
DHCP	63
(Dynamic Host Configuration Protocol)	
This is the protocol to assign IP address dynamically to each client on TCP/IP network. DHCP server controls information of IP address, gateway address, domain name and subnet mask and can assign these to client.	
DNS	96
(Domain Name System)	
IP address is composed of list of numbers, and is hard to manage. Thus we use domain name which consists of alphabet and some symbols as alias to operate computers. This system, to correspond the IP address and the domain name, is called DNS.	
Download	112
Taking and saving data from a device in remote place by using network.	

E

Encryption (WEP)	68
Adopted encryption method by IEEE802.11b as standard technique. There are 2 methods using 64-bit and 128-bit data.	
ESS-ID	67
(Extended Service Set Identifier)	
This is the ID to discriminate all PC and wireless routers which make up the wireless LAN. You need to set the same ESS-ID to all the devices on the same network.	
Ethernet	BUG14, 15
LAN communication method developed by Xerox and other companies.	
External Alarm	72

F

Filtering Settings	102
Firmware	112
Program to run this product. It is installed in the flash memory, and can overwrite the program from PC by using PC upload function of the WEB.	
Frame rate	91
Barometer for renewing displayed images per second.	
Freeze activity	87
FTP	48
(File transfer Protocol)	
A protocol to transfer file(s) to other computers. The network camera equips both Active and Passive modes, and also supports Firewall.	
F-value	139
The value to indicate brightness. The smaller the value, the light is brighter.	

H

Hub	63
Wire gathering device used in 10Base-T/100Base-TX network. Build up a network by connecting devices around a hub radially. There are various ports, like 8port, 4port.	

Glossary (Index)(Cont.)

I

IEEE802.11b 67

IEEE(Institute of Electrical and Electronics Engineers)

International standard gauge of wireless LAN by IEEE. It enables wireless communication without having complicated wiring by using direct spectrum diffusion method with communication speed of 11Mbps/2.4GHz range(max.)

Image magnification 16, 20

Infrastructure method 66

Infrastructure method is one of the components of wireless LAN networking. Construct one network by unifying wired network and wireless network through access point and/or wireless router.

InstallationBUG16, 18

Installation Environment 92

Configures installation environment of the product.

IP address 63

Address information for IP protocol. All devices communicate with IP must have IP addresses. Devices connected to the Internet must have only one global IP address in the world. IP address can be divided into network ID and host ID, and depending on the values of network ID, it also can be divided into class A, B and C.

J

JAVA™2 13, 37

Object-oriented language program developed by Sun Microsystems, Inc. of the United States. The program has the function of that automatically downloads and starts up programs from web server despite the differences of hardware or OS. Compare to JAVA™, JAVA™2 has improved performance, stability, security and correlation. The network camera uses JAVA™2 for displaying images and outputting sound on Internet Explore™ and Netscape™ Navigator.

JPEG 22, 41

(Joint Photographic Experts Group)

Standard gauge for compression of colored still image by ITU-TS (International Telecommunication Union: ex-CCITT) and ISO (International Organization for Standardization). It can compress a still image between 1/10 to 1/100 of size.

L

LAN.....BUG24, 25

(Local Area Network)

Computer networking in small area.

Lens coverBUG14, 15

LIVE 21

Images which the camera is projecting is called LIVE. When LIVE icon is displayed at the lower part of the screen, it's displaying LIVE images. See PLAYBACK

Login 13, 37

Log management 104

M

MAC Address 99, 102

(Media Access Control Address)

Assigned individual code for each network card. Ethernet sends and receives the frame(data) by using this code.

Mail settings 80

Motion sensor 75

Moving an image to the center .. 16, 20

Multi-screen mode 103

Multi-view mode 18, 39

N

NetworkBUG24, 25

PCs and other devices are connected to each other for information exchange via cables, public lines and/or radio.

Networking settings 96

ND(Neutral Density)switch 139

With the installed ND filter, outdoor and indoor monitoring is made possible by adjusting light intensity.

Normal Opened/Closed	74
NTP server	104
(Network Time Protocol)	
Server which provides accurate date and time from network.	

O

OS	3
Overwriting function	95

P

Picture quality	90
Playback	24

The camera can play recorded images. This function is called playback. You can control the recorded images with administrator controller easily. "PLAYBACK" icon will be displayed when playing recorded images, and you can distinguish it from live images. See LIVE

Playing recorded images	31
POP3	81
(Post Office Protocol Version 3)	

Protocol needed to receive e-mail on the Internet and Intranet. Client uses this when receiving e-mail from the mail server, and it has attesting function. Some mail servers use this function to send mail with SMTP. (POP3 before SMTP)

Port forwarding	BUG26
Port Number	96

The number to discriminate services (kinds of application) on TCP and UDP. For example, SMTP for e-mail uses 25 and 80 for HTTP in general.

Power Boost function	93
Power cord	4
Privacy mask	85
Preset	27
Protocol	139
P/T operation restriction	93

R

Rear cover	4
Record list	34
Recording normal images	95

Returning to the default settings .	105
Reset button	105
Resolution	90
Resume function	74
RNCP	139
(Retrieve Neighborly Cameras Protocol)	

Protocol for mutual communication. Because of this protocol, the cameras can identify each other. The camera searching application, Camera Finder, also uses this protocol.

Routing table	99
---------------------	----

Table for addressed network, which host and router are controlling, and the network interface and router to communicate with.

S

Scan	22
------------	----

The function that the lens moves in horizontal direction. Also called horizontal patrol function. The lens stops after one lap.

Screw holes for a tripod /stand	4
SD memory card	8

Secure Digital memory card. New super compact memory card that can record huge volume of multi media data.

Security settings	102
Sending mail when external alarm goes off	81

Shutter speed	92
Single-view mode	14, 37
SMTP	80
(Simple Mail Transfer Protocol)	

Protocol for sending e-mail on the Internet and Intranet. Used when exchanging e-mail between servers or when client sends mail to the server.

Sound sensitivity settings	93
Specifications	139
Still image	87
Straight-through Cable	4

One of the Ethernet cables to connect PC and Ethernet hub.

Glossary (Index)(Cont.)

Subnet mask 65
IP address is composed of network ID and host ID. It plays a role to judge the length of network ID to distinguish network ID and host ID. By using this system, it estimates whether IP address of the addressed host is in local network or remote network.

Sun visor 4
Switching views 15, 19

T

TCP/IP 139
(Transmission Control Protocol/
Internet Protocol)

Network protocol invented by a network project with the financial support from the Pentagon. This is the standard protocol of the Internet and at the same time, it is the most popularized protocol. Network layer protocol is IP, and transport layer protocols are TCP (Transmission Control Protocol) and UDP (User Datagram Protocol). FTP, SMTP and other applications use TCP/IP.

Timer recording 95

U

Updating firmware 112
URL 13
(Uniform Resource Locator)

Method for assigning the Internet resource. "http://www.toshiba.com/" is the example of when accessing a website on the Internet.

V

Video output BUG15

W

Wall bracket 4
WEP 68
(Wired Equivalent Privacy)

Encryption. Standard encryption method in IEEE802.11b. Even if someone intruded to your computer and try to read the data, it makes difficult to decode the data if you perform the encryption.

Wire clamp BUG22
Wired LAN BUG24
Wireless LAN BUG25

LAN(Local Area Network)which does not need wiring. It constructs a network by using infrared or laser in small areas.

Wireless router BUG25, 26

Device which relays data on a network to other network is called router. It decides by itself to which route to choose to forward the data by looking at IP address of network device. Wireless router has wireless LAN communication function in addition to these features.

X

xDSL BUG26

ADSL technique has been invented to have high-speed data communication by using a pair of copper wire in the analogue telephone line. Related techniques derived from ADSL are called xDSL. This is a device to connect these to the Internet.

Z

Zoom in/Zoom out 23

Errors and Messages

Followings are the explanations and trouble shootings for each error messages. The code numbers are needed when asking for a help to the Customer Service. By knowing the code number, the Customer Service can give you a proper advice and help.

- Network Related
- Web Related
- Others
- Other Messages (Informational Messages)

Network Related Messages

TCP/IP OS

CODE	Message	Cause	How to Manage
1001000	No Interruption from Camera in the last one minute.	The main unit of the camera may be in trouble.	Turn the power ON and OFF.
2001011	File System was automatically formatted by error detection.	There is an error(s) in the File System.	Formatted automatically.
2001022	SD memory card error.	<ul style="list-style-type: none">· SD memory card has been damaged.· Using unsupported SD memory card.	<ul style="list-style-type: none">· Use undamaged and supported SD memory card.· Format your SD memory card with your PC.
2000023	SD memory card is full.	<ul style="list-style-type: none">· SD memory card is full.	<ul style="list-style-type: none">· Use new one, or delete unnecessary data.· Overwrite the old data in the card by setting "Overwriting" function "ON". (Admin Menu→Camera Settings→Overwriting→Function→ON)

Errors and Messages(Cont.)

DHCP Client

CODE	Message	Cause	How to Manage
2011001	No response from DHCP server.	<ul style="list-style-type: none">· Network Camera is not connected to the LAN properly.· The DHCP server is not turned ON, or there is no DHCP server on the network even though "DHCP" setting is set to "ON".· The camera is not on the same network segment with DHCP server.	<ul style="list-style-type: none">· Make sure that the Network Camera and the LAN cable are correctly connected to the network.· Make sure that the DHCP server is turned on.· If you set the "DHCP" setting to "OFF," it means that you are not using the DHCP Server. In that case, make sure to enter correct IP address and other information in the setting menu.
2011002	Couldn't get default gateway address from DHCP server.	<ul style="list-style-type: none">· Couldn't get necessary information from the DHCP server.	<ul style="list-style-type: none">· Re-check the DHCP server settings.

FTP Client

CODE	Message	Cause	How to Manage
2041001	FTP couldn't connect to server.	<ul style="list-style-type: none">· The server is down.· Trouble with the connection line.· The FTP information is not set properly.	Configure FTP Recording Settings. (→ page 100)
2041002	FTP couldn't send recording data.	<ul style="list-style-type: none">· The server is down.· Trouble with the connection line.· The FTP information is not set properly.	Configure FTP Recording Settings. (→ page 100)

SMTP Client

CODE	Message	Cause	How to Manage
2061001	Couldn't send mail.	<ul style="list-style-type: none"> · Network Camera and the LAN are not connected properly. · SMTP server and POP3 information are wrong. · Account information settings (ID, password) for POP3 are wrong. 	Re-do the "Mail" settings. (→page 80)

DDNS Related

CODE	Message	Cause	How to Manage
2111001	Failed to resolve DDNS server name.	<ul style="list-style-type: none"> · DDNS server information is wrong. 	Enter the correct information on "DDNS" settings.
2111002	Failed to connect to DDNS server.	<ul style="list-style-type: none"> · DDNS server information setting (→page 100) is wrong. · Network Camera and the LAN are not connected properly. · Using unsupported DDNS service. 	Enter the correct information on "DDNS" settings.
2111003	Failed to update DDNS database.	<ul style="list-style-type: none"> · DDNS server information setting (→page 100) is wrong. · Network Camera and the LAN are not connected properly. · Using unsupported DDNS service. 	Enter the correct information on "DDNS" settings.

Errors and Messages(Cont.)

WEB Related Messages

CODE	Message	Cause	How to Manage
3001603	F/W update failed.	<ul style="list-style-type: none">· Tried to update wrong firmware.· Firmware file is damaged.	<ul style="list-style-type: none">· Make sure that the firmware is certainly for your IK-WB01A or IK-WB11A.· Make sure that the version and the size of your firmware and the one on the TOSHIBA website are the same. If they don't match, download the matched firmware.

Others

CODE	Message	Cause	How to Manage
4000001	Battery is empty.	<ul style="list-style-type: none">· The internal battery of the camera has run out of power.	<ul style="list-style-type: none">· The internal battery is rechargeable. Even if the power is turned off for a long period of time, it will be recharged when the power is turned on again.· If it's not rechargeable anymore or usable time is getting shorter, ask your dealer and change the battery.

Other Messages (Informational Messages)

CODE	Message
2000000	Rebooting
2000001	Reset to factory settings.
2000010	File System start.
2000012	File System was formatted.
2000020	SD memory card was inserted.
2000021	SD memory card was ejected.
2000101	LAN communication was started.
2000102	Wireless communication was started.
2010001	IP address was assigned.
2010003	IP address was renewed.
2010004	IP address was changed by DHCP server response.
2050001	Time was synchronized with NTP server.
2110004	DDNS database updated.
3000001	Logged in as Administrator.
3000101	Camera basic settings were updated.
3000102	Camera PAN/TILT settings were updated.
3000103	Camera alarm settings were updated.
3000104	Camera motion-sensor settings were updated.
3000105	Camera privacy-mask settings were updated.
3000106	Camera recording settings were updated.
3000201	Network settings were updated.
3000202	Wireless network settings were updated.
3000203	HTTP port was updated.
3000204	Mail settings were updated.
3000205	DHCP settings were updated.
3000206	DNS settings were updated.
3000207	NTP settings were updated.
3000208	Routing table was updated.
3000209	ARP table was updated.
3000210	ARP table was deleted.
3000211	FTP settings were updated.
3000301	IP address restriction were updated.
3000302	MAC address filter were updated.
3000401	Multi screen settings were updated.
3000501	Administrator ID was updated.
3000502	Administrator password was updated.
3000503	Camera List was updated.
3000504	Time was set by Administrator.
3000505	Time was synchronized with NTP server by Administrator.
3000506	Daylight savings was turned on.
3000507	Daylight savings was turned off.
3000508	Time zone setting was updated.
3000601	F/W update was started.
3000602	F/W update was successful.
3000701	Syslog transfer settings were updated.
3000702	Syslog was cleared.

Before Calling Service Personnel...

Introduction

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
There is no IP address of your network camera on The Camera Finder's Network Camera List. (Part 1)	●The power of the camera is not turned on.	●Turn on the power.	<input type="radio"/>	<input type="radio"/>
	●LAN cable is not connected.	●Connect the LAN cable of the camera to a hub or router in the right way. ●Be sure to turn on the power of the hub and router.	<input type="radio"/>	
	●The order of connecting LAN cable and turning on the power of the camera is not right.	●If you turn on the camera before connecting the LAN cable, the camera perceives it as wireless LAN mode. Connect the LAN cable to the hub or router first and then, turn on the camera again. ※Be sure to turn on the power of the hub and router.	<input type="radio"/>	
	●The order of connecting LAN cable and turning on the power of the camera is not right.	●If you connect the LAN cable to the powered on hub or router first, the camera perceives it as wired LAN mode. Even if you disconnect the cable after the camera started as the wired, it will not turn to wireless mode. In this case, turn on the power of the camera again when disconnecting the LAN cable.		<input type="radio"/>
	●LAN cable is not connected to the PC.	●Connect the LAN cable to the PC in the right way.	<input type="radio"/>	
	●Wireless LAN setting is not right.	●Confirm that the wireless LAN setting of the camera and your wireless LAN environment are the same.		<input type="radio"/>
	●IP address of the PC is not configured.	●Configure the IP address of your PC correctly. (→ Basic User's Guide page 27)	<input type="radio"/>	<input type="radio"/>
Can't connect the camera and the wireless LAN.	●There may be other wireless devices near your PC or the camera. ●The network camera uses 2.4GHz radio range. If you have microwave near the PC or the camera, or if you are using something like Bluetooth™, it would be difficult to have good wireless connection. ●Try setting other wireless channels which has better		<input type="radio"/>	

Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
There is no IP address of your network camera on The Camera Finder's Network Camera List. (Part 2)	<ul style="list-style-type: none"> ● Setting of adhoc or infrastructure method is different from actual wireless environment. 	<ul style="list-style-type: none"> ● Check the wireless connection mode. ● When connecting your PC and the network camera directly in wireless connection mode, set the network camera in adhoc mode. (→ page 97) ● When connecting your PC and the network camera via wireless router or access point (AP), set the network camera in infrastructure mode. (→ page 97) ※ The network camera is set in adhoc mode in default. 		<input type="radio"/>
Cannot display a browser from Camera Finder.	<ul style="list-style-type: none"> ● Installed directory of browser is wrong. 	<ul style="list-style-type: none"> ● Assign the directory where you are going to install the browser. Start Camera Finder and go to "View"/"Customize"/"Browser Selection." 	<input type="radio"/>	<input type="radio"/>
The message, "The page cannot be displayed," shows up, and cannot login to the camera even if you start Camera Finder.	<ul style="list-style-type: none"> ● The IP addresses of the camera and your PC are wrong. 	<ul style="list-style-type: none"> ● Set the correct IP address of the network camera. ● Set the correct IP address of your PC. 	<input type="radio"/>	<input type="radio"/>
	<ul style="list-style-type: none"> ● HTTP port number is wrong. 	<ul style="list-style-type: none"> ● Usually the network camera uses "80" for the HTTP port number. If you set the number other than 80, enter the number registered as the HTTP port number in Camera Finder. ● When entering the IP address of the network camera directly to the browser, assign the port number after <> like the example below. http://192.168.0.30:88/admin.htm 	<input type="radio"/>	<input type="radio"/>
	<ul style="list-style-type: none"> ● Proxy has set to the browser. 	<ul style="list-style-type: none"> ● When proxy is set to the browser, sometimes you may not able to login. Change the setting which will not via the IP address of the network camera from the proxy of the browser, or the setting of host name which will not via proxy. 		

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot login to the camera even though entering the IP address of the camera directly to the browser, and "The page cannot be displayed" shows up.	See "There is no IP address of your network camera on The Camera Finder's Network Camera List. (Part 2)," or "The message, 'The page cannot be displayed,' shows up, and cannot login to the camera even if you start Camera Finder."			
Error message shows up when trying to login.	● Entering wrong login ID and password.	● Enter right login ID and password. ※ The default login ID is "root," and the password is "ikwb."	<input type="radio"/>	<input type="radio"/>
	● CapsLock of the PC is ON.	● The camera discriminates capital letter and lower-case letter. Enter your right login ID and password.	<input type="radio"/>	<input type="radio"/>
	● Logged out in wrong way last time (exit from the admin menu by clicking  button).	● The camera keeps the last login information for 5 minutes. Try to login again 5 minutes later or restart the camera by turning On and OFF the power.	<input type="radio"/>	<input type="radio"/>
	● The single or multi-view screen is still displayed.	● The camera keeps login information even after you logged out if the single or multi-view screen is still displayed. Close the screen and try login procedure one more time.	<input type="radio"/>	<input type="radio"/>
	● There is an another PC which is performing administrator login.	● An administrator login to the camera is valid from only one PC. Log out from the other PC and try again.	<input type="radio"/>	<input type="radio"/>
	● You forget your login ID and the password.	● You need to reset the camera. Remember that if you perform reset procedure of the camera, all the settings you have made will be deleted and the camera goes back to its default settings.	<input type="radio"/>	<input type="radio"/>

Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot access to the camera from the Internet.	●Default gateway is not configured.	●Register your broadband router to the network camera as default gateway. (→ page 65)	<input type="radio"/>	<input type="radio"/>
	●Port forwarding is not configured to the broadband router.	●Configure port forwarding function (static IP masquerade, NAPT) to your broadband router. For details, read the user's guide of your broadband router.	<input type="radio"/>	<input type="radio"/>
	●Setting access restriction from the Internet (WAN side), like IP filter, to the broadband router.	●Change the restriction setting. For details, read the user's guide of your broadband router.	<input type="radio"/>	<input type="radio"/>
	●Using local (private) IP address.	●When accessing via the Internet, you need to set global IP address provided from your Internet provider to the broadband router. For details, read the user's guide of your broadband router. ※There are fixed IP address and IP address from DHCP server that an Internet provider provides as a global IP address. Ask your Internet provider for more information.	<input type="radio"/>	<input type="radio"/>
	●The IP address which was provided from the DHCP server of the provider has been changed.	●Confirm the new IP address and try to access again with the new IP address. ●Renew the information registered to the DDNS server.	<input type="radio"/>	<input type="radio"/>
Cannot perform administrator settings. (Part 1)	●Lost the power of the camera during the performance.	●Make sure that the power of the network camera is ON.	<input type="radio"/>	
	●LAN cable of the camera has been pulled off during the performance. (When connecting in wired mode.)	●Make sure that the LAN cable is connected to a hub or router in the right way.	<input type="radio"/>	
	●LAN cable of the PC has been pulled off during the performance. (When connecting in wired mode.)	●Make sure that the LAN cable is connected to a hub or router in the right way.	<input type="radio"/>	
	●Lost the power of a hub or router during the performance.	●Make sure that the power of a hub or router is ON.	<input type="radio"/>	

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot perform administrator settings. (Part 2)	<ul style="list-style-type: none"> ●Lost the power of a wireless router or access point (AP) during the performance. 	<ul style="list-style-type: none"> ●Make sure that the power of a wireless router or access point (AP) is ON. 		○
	<ul style="list-style-type: none"> ●Did not perform any operations for more than 5 minutes while you are displaying admin menu or other setting menus. 	<ul style="list-style-type: none"> ●The network camera setting screen automatically logs you out when you don't perform any operations for more than 5 minutes. Try login procedure again 5 minutes later. 	○	○
	<ul style="list-style-type: none"> ●HTTP port number in "Network Connection Settings" under "Network Settings" has been changed. 	<ul style="list-style-type: none"> ●Usually the network camera uses "80" for the HTTP port number. If you set the number other than 80, enter the number registered as the HTTP port number in Camera Finder, and then try administrator login procedure again. ●When entering the IP address of the network camera directly to the browser, assign the port number after <> like the example below and try to login again. http://192.168.0.30:88/admin.htm 	○	○
	<ul style="list-style-type: none"> ●IP address in "Network Connection Settings" under "Network Settings" has been changed. 	<ul style="list-style-type: none"> ●If you change the IP address, you cannot keep your settings in the setting screen with your old IP address. Search your camera with the application, Camera Finder, and try administrator login procedure again. ●When you enter IP address of the camera directly to the browser, enter the new IP address in URL like example below, and try login procedure again. http://192.168.0.50/admin.htm 	○	○

Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot perform administrator settings. (Part 3)	<ul style="list-style-type: none"> ●ESS-ID in "Wireless LAN Settings" under "Network Settings" has been changed. 	<ul style="list-style-type: none"> ●Make sure that the settings and conditions of wireless LAN mode of all devices, including the network camera, are all the same. ※Some wireless devices recognize ESS-ID automatically; however, you need to configure the right ESS-ID on the network camera. ※When using the network camera in wired mode, there is no problem to access the camera even if you made some changes in wireless LAN settings. 		<input type="radio"/>
	<ul style="list-style-type: none"> ●Wireless channel(COM Channel) in "Wireless LAN Settings" under "Network Settings" has been changed. 	<ul style="list-style-type: none"> ●Make sure that the settings and conditions of wireless LAN mode of all devices, including the network camera, are all the same. ※Some wireless devices recognize COM Channel automatically; however, you need to configure the right COM Channel on the network camera. ※When using the network camera in wired mode, there is no problem to access the camera even if you made some changes in wireless LAN settings. 		<input type="radio"/>
	<ul style="list-style-type: none"> ●Settings of WEP in "Wireless LAN Settings" under "Network Settings" has been changed. 	<ul style="list-style-type: none"> ●Make sure that the settings and WEP conditions of wireless LAN mode of all devices, including the network camera, are all the same. ※When using the network camera in wired mode, there is no problem to access the camera even if you made some changes in wireless LAN settings. 		<input type="radio"/>

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot perform administrator settings. (Part 4)	<ul style="list-style-type: none"> You have entered and saved different IP address from your PC to "Access Restriction Settings" under "Security Settings." 	<ul style="list-style-type: none"> Try login procedure again after setting the IP address which you have set to "Access Restriction Settings" of the camera to your PC. When you forget the IP address you have set to "Access Restriction settings," you need to reset the setting information in the network camera. Remember that if you perform reset procedure of the camera, all the settings you have made will be deleted and the camera goes back to its default settings. See page 105 for details on how to perform reset procedures. ※You need technical knowledge of the network to configure this item. 	<input type="radio"/>	<input type="radio"/>
	<ul style="list-style-type: none"> You have entered and saved the different MAC address from your PC to "Filtering Settings" under "Security Settings." 	<ul style="list-style-type: none"> You need to reset the setting information in the network camera. Remember that if you perform reset procedure of the camera, all the settings you have made will be deleted and the camera goes back to its default settings. ※You need technical knowledge of the network to configure this item. 	<input type="radio"/>	<input type="radio"/>
Cannot display images from the network camera.	<ul style="list-style-type: none"> Java™2 Runtime Environment SE Ver1.4.2 is not installed. 	<ul style="list-style-type: none"> Install Java™2 Runtime Environment SE Ver1.4.2 	<input type="radio"/>	<input type="radio"/>
	<ul style="list-style-type: none"> The Internet line is busy. 	<ul style="list-style-type: none"> Wait for a little while. Sometimes it takes time to display images. 	<input type="radio"/>	<input type="radio"/>
	<ul style="list-style-type: none"> There are not enough resources (CPU power, RAM). 	<ul style="list-style-type: none"> There are the recommended requirements of PC to view the images of the network camera. (→ Basic User's Guide page 12) Close all applications other than the network camera browser. 	<input type="radio"/>	<input type="radio"/>

Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Renewal speed of network camera images is too slow.(Part 1)	●Picture size is too large.	●The default setting of picture size is VGA(640x480). Go to "Camera Settings"/ "General Settings"/ "Camera Picture Size" and set smaller picture size to have faster renewal speed.	<input type="radio"/>	<input type="radio"/>
	●The "Picture Quality" is set to "HIGH."	●When you choose "LOW" in "Picture Quality" in "General Settings" under "Camera Settings," the renewal speed becomes faster; however, the picture quality becomes poor.	<input type="radio"/>	<input type="radio"/>
Renewal speed of network camera images is too slow.(Part 2)	●More than one users are accessing the camera at the same time.	●When many users access to the camera at the same time, the renewal speed of the image becomes slow.	<input type="radio"/>	<input type="radio"/>
	●Connecting the network camera to a router or an access point (AP) in wireless mode.	●Display speed of the images in wireless mode is slower than that of wired mode. If you'd like to have faster display speed, connect the camera in wired connection mode.	<input type="radio"/>	<input type="radio"/>
No colors in the images.	●The Auto B/W is ON.	●Change the Auto B/W setting to OFF.	<input type="radio"/>	<input type="radio"/>
Cannot display the camera images in the dark.	●Exposure is not enough.	●Go to "Camera Settings"/ "General Settings"/"Auto B/W" and set the "Auto B/W" to ON. The images in the dark become black and white, but it enables to display the images to some point. If you still cannot display images, try using lights to have enough exposure. ●It won't affect to the images in the day time. IK-WB11A also has Auto Sensitivity Boost and Auto Slow Shutter functions. Set these functions to ON depending on the situations.	<input type="radio"/>	<input type="radio"/>
The network camera images are reversed in upside-down.	●Installed the camera in wrong way.	●Make sure that the camera is installed in right way. "TOSHIBA" logo on the bottom of the network camera has to be facing front.	<input type="radio"/>	<input type="radio"/>
	●Ceiling installation.	●When you suspend the camera from the ceiling, the images may displayed upside-down. Go to "Camera Settings"/"General Settings" and set the "Installation Environment" to "Ceiling."	<input type="radio"/>	<input type="radio"/>

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Colors of the images are poor.	● Monitor color setting of your PC is set to 16 bit or less.	● Set the monitor color higher than 16bit.	<input type="radio"/>	<input type="radio"/>
Focus of the images is poor.	● The lens cover of the camera is not clean, or some dusts are on it.	● Wipe off the lens with dried cloth.	<input type="radio"/>	<input type="radio"/>
	● Distance to an object is too far.	● The camera cannot focus at close range (less than 80cm). Use the camera at the minimum distance of 80cm or more for IK-WB11A and 35cm or more for IK-WB01A from an object.	<input type="radio"/>	<input type="radio"/>
No sound is output.	● Java™2 Runtime Environment SE Ver1.4.2 is not installed.	● Install Java™2 Runtime Environment SE Ver1.4.2	<input type="radio"/>	<input type="radio"/>
	● Sound volume on your PC is "0."	● Adjust the volume of your PC.	<input type="radio"/>	<input type="radio"/>
	● No microphone is installed.	● Install commercial microphone (→ Basic User's Guide page 15) to your network camera.(IK-WB11A only)	<input type="radio"/>	<input type="radio"/>
	● The microphone you are using is not a supported microphone of IK-WB11A.	● You can install only condenser typed monaural microphone. Plug type has to be monaural 3.5f.	<input type="radio"/>	<input type="radio"/>
Sound sensitivity of your camera is poor.	● The "Sound Sensitivity" is set to "LOW."	● You can adjust the sound sensitivity at "Camera Settings"/ "General Settings"/ "Sound Sensitivity." The sensitivity heightens when you set it to "HIGH."	<input type="radio"/>	<input type="radio"/>
	● The microphone is facing wrong way.	● Face the microphone of the camera where you want to gather sound. (IK-WB11A only)	<input type="radio"/>	<input type="radio"/>

Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Cannot send mail.	●Settings of SMTP, POP3 server may not be right.	●Check your SMTP and POP3 server which are provided from your provider. (→ page 80)	<input type="radio"/>	<input type="radio"/>
	●DNS server setting may not be right.	●Set your DNS server from your provider to "Primary" and "Secondary" in "DNS Settings." (→ page 96) ※Sometimes "primary" is described as "master" and "secondary" is described as "slave," but these meanings are the same.	<input type="radio"/>	<input type="radio"/>
	●Mail sending conditions are not configured.	●To send mail, you need to perform mail sending settings of the camera. (→ page 85)	<input type="radio"/>	<input type="radio"/>
Cannot perform Auto Time Settings.	●NTP server setting may not be right.	●The NTP server released on the Internet may become invalid without notifying users.	<input type="radio"/>	<input type="radio"/>
Couldn't complete firmware updating.	●Couldn't complete the updating because of network trouble, the power has cut off or other reasons.	●Retry updating firmware by following steps of "Updating the Firmware" on page 112.	<input type="radio"/>	<input type="radio"/>
Cannot solve the problems.	—————	●Consult with your dealer.	<input type="radio"/>	<input type="radio"/>
Recorded images are not saved in FTP server.	●FTP recording function is not set to ON.	●Check the FTP recording function whether it is set to ON. (→ page 100)	<input type="radio"/>	<input type="radio"/>
	●IP address of the FTP server, ID/ password or transfer directory is not set properly.	●Set the correct information in the setting screen. (→ page 100)	<input type="radio"/>	<input type="radio"/>
	●Could not keep the communication with the server during file transfer using FTP.	●The network camera watches the status of the FTP server all the time. If you leave that condition for approximately 5 minutes, the recording resumes. ●If the recording did not resume even if you wait for more than 5 minutes, check the connections with FTP server and the network camera. ●Recording files are stored in the network camera. When the connection is re-established, all the data stored in the camera will be send to FTP server. (IK-WB11A only)	<input type="radio"/>	<input type="radio"/>

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Symptom	Cause	How to Manage	LAN Connection	
			Wired	Wireless
Pre-/post-recording files of the Alarm are not sent to the FTP server.	●Pre-recording data is the data before alarm has generated. Therefore, its data sending order is not necessarily in order.	●Pre-recording images will be sent after all the post-recording images are sent. Please wait for a while when pre-recording images are not arrived. Also, depending on the conditions of your server, networking, image size and/or image quality settings, numbers of sent images may become fewer than your expectation.	<input type="radio"/>	<input type="radio"/>

Others

- When very strong light strikes at the lens, you might see stripe patterns (smear) on the images, but these are not malfunctions. If this happens, reinstall the camera in another place, or try to change the direction of the lens.
- Sound may not always synchronize with the camera images.
- You might hear some motor running noise when you move the lens using PAN/TILT function while outputting sound. However, this is not a malfunction. If this happens, try to lower the sound sensitivity from the Admin Menu. For details, see "Sound Sensitivity" on "General Settings" (→ page 93).

Specifications

Model name	IK-WB01A	IK-WB11A
Image sensor	1/5-inch CCD	1/2-inch CCD
Effective Picture Element	350k pixel	1.45 megapixel
Focal length	f=2.6mm	f = 6.0 mm
Angle of view	Horizontal: 58°, vertical: 45°, diagonal: 70°	Horizontal: 56°, vertical: 44°, diagonal: 67°
Maximum relative aperture	F = 2.8	F = 1.4
Shutter speed	AES	AES: 1/120, 1/60, 1/30, 1/20, 1/15, 1/8, 1/4, 1/2, 1, 2, 4, sec.
Minimum illumination	2 lx (Frame Rate HIGH) 0.7lx (Frame Rate LOW)	1 lx (Normal, Auto-Sensitivity Boost Off) 0.03 lux (Slow shutter ON)
Pan	112° (-56° to 56°)	
Tilt	54° (-49° to 5°)	
Pan/tilt presets	10 positions	
Alarm terminal	Input × 1, Output × 1	
Image size	640×480 320×240 160×120 320×240 zoom 160×120 zoom	1280×960 800×600 640×480 320×240 160×120
Image compression method	JPEG	
Quality settings	3 levels	
Maximum frame rate	Max. 7.5 fps(640x480), Max. 15 fps(320x240zoom, 160x120zoom)	Max. 7.5 fps(1280x960, 800x600, 640x480), Max. 30 fps(320x240, 160x120)
Audio *1	Available (built-in microphone, PCM)	Available (MIC IN, PCM)
Privacy mask feature	Unavailable	Available
Motion alarm feature	Unavailable	Available
Normal recording feature	Unavailable	Available
External storage media	Unavailable	SD memory card
Video output	Unavailable	Available *2
Mail notification feature	Available	
ND switching mechanism *3	None	Available
Interface	RJ-45 (10Base-T/100Base-TX), wireless LAN (IEEE802.11b)	
Protocols	TCP/IP, UDP/IP, HTTP, SMTP, DNS, DHCP, NTP, ARP, ICMP, syslog, DDNS, RNCIP, FTP	
Power supply voltage	10V DC	
Power consumption	8W	
Guaranteed operating temperature	-20°C to +50°C	
Guaranteed performance temperature	0°C to +40°C	
Guaranteed operating humidity	80% or less	
Storage temperature	-20°C to +60°C	
Weight	Approx. 600 g (camera only)	Approx. 650 g (camera only)
External dimensions	127 (W) × 127 (H) × 110 (D)mm (camera only)	
Accessories	AC adaptor (1), Power cord (1), Wall attachment (for indoor use) (1), Clamp filter(x2) Screw set, Basic User's Guide, Quick Start Guide, LAN cable (Straight-through cable)(1), Wire Clamp(1)	AC adaptor (1), Power cord (1), Rear cover (waterproof cover and wall attachment holder for indoor and outdoor installation)(1), Sun visor (for outdoor installation)(1), Wall bracket(1), Screw set, Basic User's Guide, Quick Start Guide, LAN cable (Straight-through cable)(1), Wire Clamp(1)

*1: The sound may not be clear depending on the conditions of the lines.

*2: The image output is for checking the image during installation. Images and sounds are not delivered, and recording function will not work during installation.

*3: The ND filter makes possible to monitor either outdoor or indoor location by controlling light intensity.

● Designs and specifications may change without prior notice for better improvement.

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Appearance Diagram (IK-WB01A)

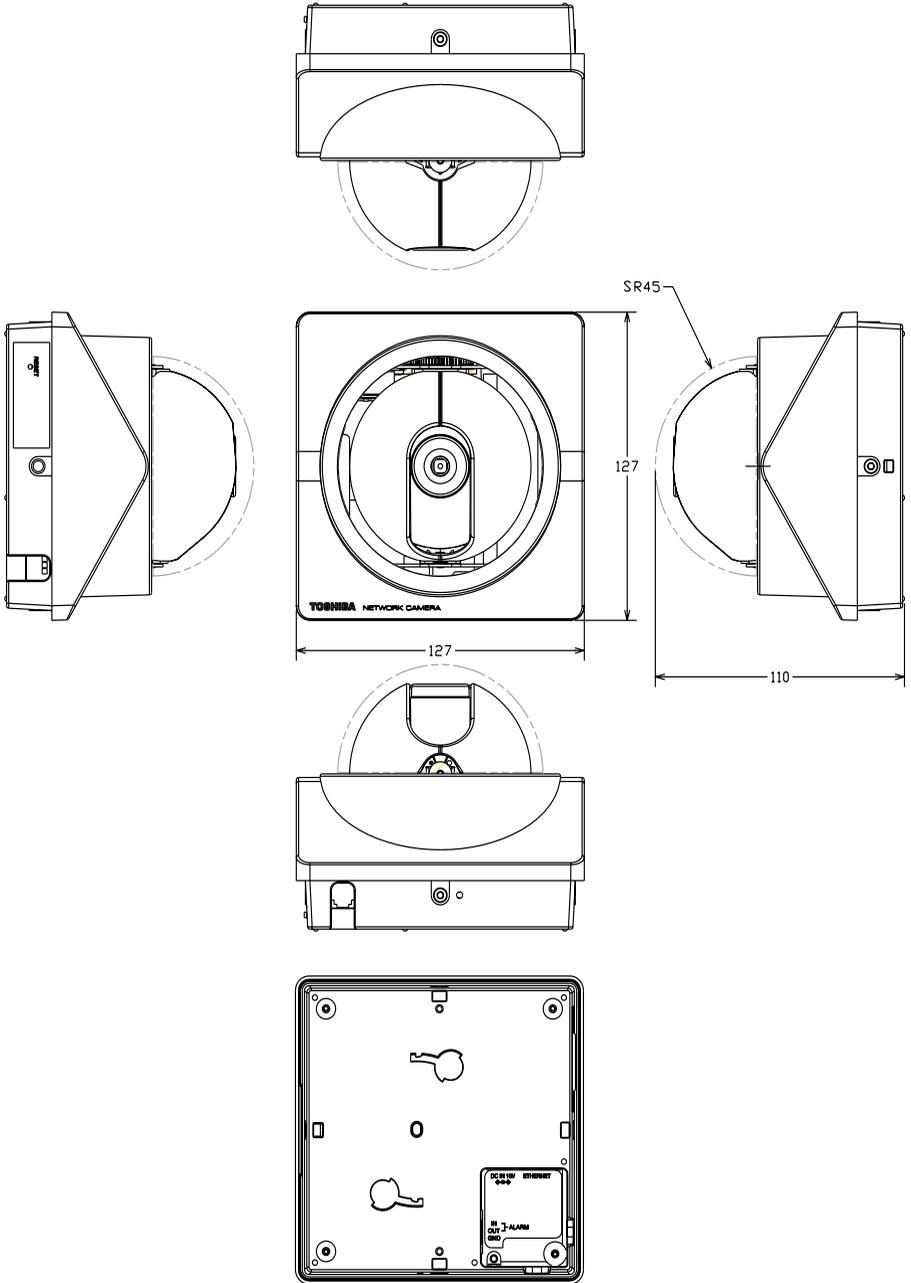
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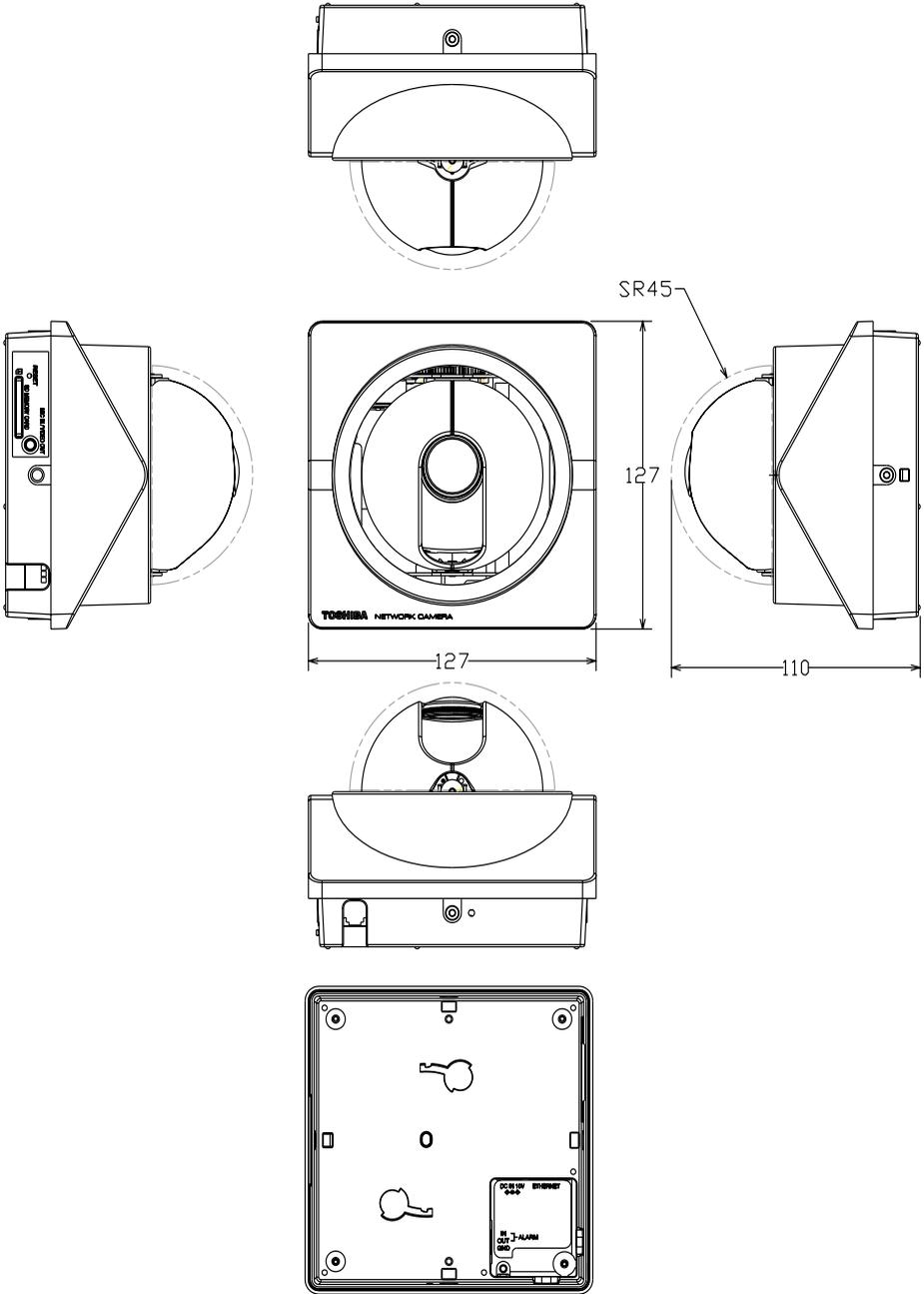
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Appearance Diagram (IK-WB11A)



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V2.0