### **TOSHIBA**

### **NETWORK CAMERA**

# Model: IK-WB01A IK-WB11A

### Basic User's Guide



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

■ http://www.netcam.toshiba.com

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

If necessary, download "Advanced User's Guide" from above Toshiba website.

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.

 $\ensuremath{\mathsf{IK}\text{-}WB01A}$  is designed for indoor-use only. You may use  $\ensuremath{\mathsf{IK}\text{-}WB11A}$  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.
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- Netscape<sup>™</sup> and Netscape<sup>™</sup> Navigator are registered trademarks of Netscape<sup>™</sup> Corporation.
- Ubiquitous TCP/IP-OS Copyright(c) 2002 Ubiquitous Corp.

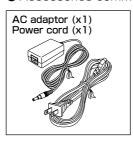
Operation

### 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





Accessories for IK-WB01A





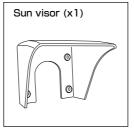
Screw set
Self-tapping screw (x1) (Black) 

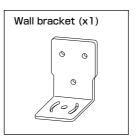
LAN cable.

### ● Accessories for IK-WB11A

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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# Installation/Setup

Operation

Others

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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 steped 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.
- 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.
  - 8. 16. 32. 64. 128. 256. and 512 MB SD memory SD memory card: 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 lifespan (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
- 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.

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### 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 6) 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

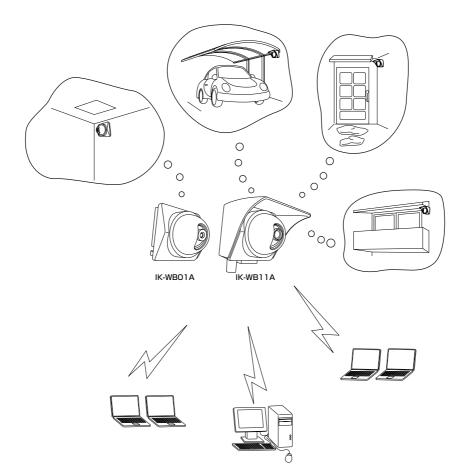
Rated output : 10 V DC, 1.5 AOperating temperature :  $0^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ Storage temperature :  $-20^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ 

External dimensions : 50 x 32 x 85 mm (W / H / L)

### **Overview of the Network Camera**

The IK-WB01A/IK-WB11A network camera can deliver video images and sound in real time using the Internet or an intranet. The camera is equipped with Ethernet (RJ-45) 10BASE-T/100BASE-TX and wireless LAN IEEE 802.11b network interfaces.

IK-WB11A can be used in various indoor and outdoor environments. IK-WB01A should be used indoors only.



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### **Features of the Camera**

#### Supports wireless LAN

The camera equips the wireless LAN IEEE 802.11b system. This enables you to connect the camera and your computer without using a LAN cable.

#### Built-in pan/tilt mechanism

A built-in pan (left/right) and tilt (up/down) mechanism enables you to use the Internet browser to change the direction of the camera lens. The camera also comes with Scan, Presets, Auto Patrol and various other monitoring features

### Equipped with 350K pixel Color CCD (IK-WB01A)

A 350K pixel, color CCD enables the delivery of images up to 640 x 480 dots.

#### Equipped with megapixel CCD (IK-WB11A)

A 1.45 megapixel, progressive CCD enables the delivery of images up to 1280 X 960 dots. Images are delivered at high resolutions approaching those of digital cameras.

#### Supports multiple cameras

Toshiba's original protocol, RNCP, allows Toshiba network cameras to identify each other on the same network. This enables images from automatically identified network cameras to be displayed in multi-view screen in the same browser window.

The number of windows in the multi-view display automatically changes (4  $(2 \times 2)$ ,  $9(3 \times 3)$  or  $16(4 \times 4)$  windows) accordingly to the number of identified cameras.

The cameras on other networks can be displayed on the same multi-view display screen by registering the cameras manually.

#### Capable of delivering sound

The products deliver the sound input from an external microphone (IK-WB11A) or built-in microphone (IK-WB01A) to you via the network.

#### Mailing function

This feature allows you to receive mail messages with images when alarms

### ■ Built-in SD memory card interface (IK-WB11A)

The use of SD memory cards enables the recording of images for long periods of time, as well as recordings when alarms go off.

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

### Motion detection (IK-WB11A)

The camera incorporates the motion detector to generate an alarm.

### Privacy mask function (IK-WB11A)

This feature effectively maintains the privacy of delivered images. It allows you to specify the masking areas in images.

### ● Equipped with a high-resolution, low F-stop lens (IK-WB11A)

The camera is equipped with a high-resolution, F1.4 high-quality lens for full reproduction of images at a resolution of 1.45 megapixels.

#### Waterproof camera that can be used outdoors (IK-WB11A)

A waterproof structure facilitates outdoor use. \* 1 Waterproof specifications: IPX3 (Weather Resistant Rating)

\* 1: Be sure to attach the Sun visor when installing the camera outside. Install the camera where it will not be exposed to direct rain or sunlight. Also, consult with the installation workers to ensure that the AC adaptor, power cord, and LAN cable are installed with protection against the weather in an outdoor location.

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- High Sensitivity (IK-WB11A)
   The camera accomplishes highly sensitive night-time monitoring by using a slow-shutter speed (up to 4 seconds), Simple DAY/NIGHT function, and an auto sensitivity boost function.
- Employs ND (Neutral Density) switching mechanism (IK-WB11A) Outdoor and indoor location monitoring is made possible because of the ND switching mechanism even though the camera has a fixed-iris lens.

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### **Setting Up the Network Camera Environment**

### Requirements for Network Camera Monitoring System

O Administrator's personal computer

This camera cannot be used by itself. Be sure to connect the camera to a personal computer and network. This User's Guide refers to a personal computer that has been granted all privileges for configuring, operating, monitoring, and other operations as the "administrator's personal computer."

System recommended requirements

- · Windows® 2000/XP
- · Internet Explorer<sup>TM</sup> Ver. 6.0 or Netscape<sup>TM</sup> Navigator 7.0
- · CPU: Intel® Pentium® III 500 MHz or greater
- · Memory: at least 256 MB
- · Requires the installation of the freeware "Java™ 2 Runtime Environment SE ver.1.4.2" of Sun Microsystems, Inc. of the United States. (The Version at present (July 2003))
- ※ If "Java™ 2 Runtime Environment SE Ver.1.4.2" is not installed, this
  product may not output images or sound properly.

http://java.com

The URL may change without prior notice.

Downloading the setup file using dial-up communication is not recommended because the setup file size exceeds 10 MB. It is recommended to use broadband communication to download this file.

¾ Java™ 2

This is the second generation of the Java $^{\text{TM}}$  programming language promoted by Sun Microsystems, Inc. of the United States. There are improvements in performance, stability, security, and interoperability compared with the previous generation.

- \*\* This User's Guide refers to a personal computer that is used just for monitoring images as a "user's personal computer." Multiple users' personal computers can monitor images from a single network camera. For details, refer to the Advanced User's Guide (See cover page).
- O Network camera (this product)
  - · Purchase the required and appropriate number of cameras for the installation location and the environment of the building or other location.

- O Appropriate connection devices (hub, router, etc.) and LAN cable for the network system environment.
  - $\cdot$  Not required if you are going to connect the personal computer and network camera directly using a wireless LAN.
  - · The type of LAN cable depends on the connection method used. For details, refer to "Using LAN Cable" (→ page 24).
- O Select appropriate fixtures for the network system environment
  - · Mounting the camera directly to the wall → Fix the camera in place with the attachment (accessory)(IK-WB01A(→page 16))(IK-WB11A(→page
- O Install the camera search application ("Camera Finder")
  - · Download "Camera Finder" from <a href="http://www.netcam.toshiba.com">http://www.netcam.toshiba.com</a>, and then install it. (→ page 34)

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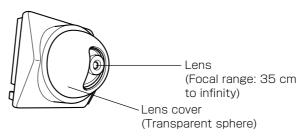


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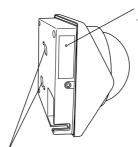
### Setting up the Network Camera Environment (Cont.)

### Names of Camera Parts (IK-WB01A) Front



**Bottom** 

### Side



Reset button (→ page 39)

Reset the settings to the defaults by using a thin, pointed object to press the button for at least 5 seconds. (The AC adaptor must be connected) (The log information is not returned to

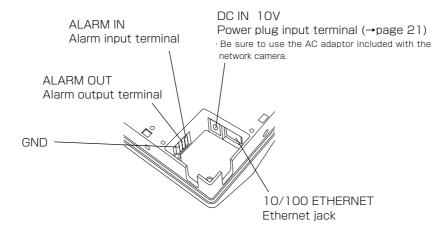
(The log information is not returned to the default state. To return the log information to the default state, delete the log information in the settings screen.)





Built-in microphone (→ page 10)

### Rear

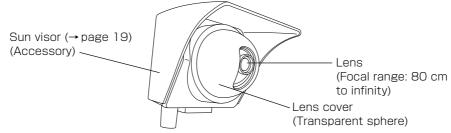




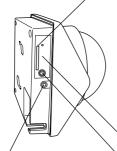
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### Names of Camera Parts (IK-WB11A) Front



### Side



Rear cover fixing screw (M3) (→ page 19)

#### Reset button (→ page 39)

Reset the settings to the defaults by using a thin, pointed object to press the button for at least 5 seconds. (The AC adaptor must be connected)

(The log information is not returned to the default state. To return the log information to the default state, delete the log information in the settings screen.)

You can turn video output on/off by pressing

• You can turn video output on/off by pressing the button for less than one second. When video output is on, images and sound cannot be delivered to the network and images cannot be recorded. Use this feature only when, for example, checking the angle of view during installation.

#### SD memory card slot (→ page 7)

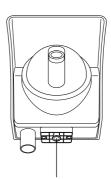
### Microphone input/Video output jack

Jack for connecting an external microphone. Use 3.5  $\phi$  monaural-plug microphone.

 Sound input from a microphone, video signal can be simultaneously output if you use a stereo mini plug to mono dual jack conversion adapter (commercially available product).

adapter (commercially available product).
Use the reset button to turn video output on/ off.

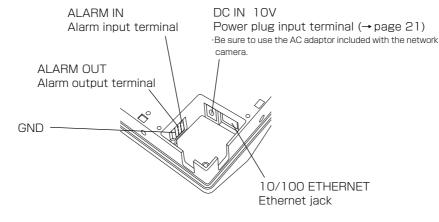
### **Bottom**



Screw hole for attaching a tripod or other stand.

#### Rear

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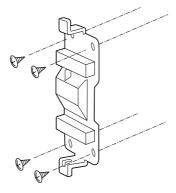
### Installing the Camera (IK-WBO1A)

The IK-WB01A is for indoor use only. The following explains the installation procedure.



### Set the wall attachment to the wall

 $\cdot$  Attach each of the four corners to the wall using four wood screws .



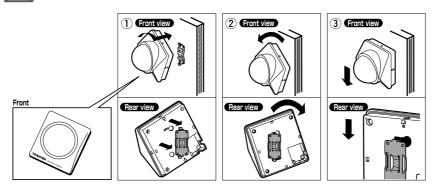
#### Important

 Securely tighten the screws during installation to ensure not to become loosen.

# Connect the AC adaptor cable and the LAN cable to the camera

- · For details, refer to "Connecting the Power Cord" (→ page 21).
- · If you are going to use a wireless LAN, you need to connect the AC adaptor cable only.

# $oldsymbol{3}$ Set the camera to the wall attachment



- ① Place the camera to the wall attachment at the angle shown in the picture.
- ② Turn the camera counter-clockwise
  - ·Make sure that the camera and wall attachment are properly fitting together
- 3 Push down the camera perpendicularly.

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### Important

- Take care not to pinch the power cable and the LAN cable between the camera and wall when attaching the camera to the wall attachment.
- Secarely tighten the screwa during installation to ensure not to become loosen.

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### Installing the Camera (IK-WB11A)

Some provided parts are required for installing the camera.

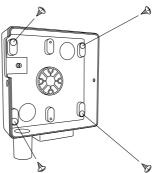
- Installing the camera indoors
  - · Rear cover
- Installing the camera outdoors
  - · Rear cover
  - · Cover for outdoor installation

#### Indoor Installation



### Install the rear cover to the wall

· Install each of the four corners to the wall using four wood screws.

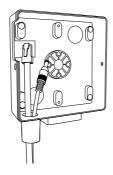


#### Important

Securely tighten the screws during installation to ensure not to become loosen.

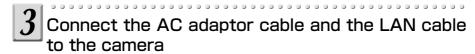


# Insert the AC adaptor cable and the LAN cable through the tube part of the rear cover



- · Insert both cables from below.
- $\cdot$  If you are going to use a wireless LAN, you need to insert the AC adaptor cable only.



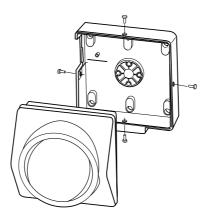


- $\cdot$  For details, refer to "Connecting the Power Cord" ( $\rightarrow$  page 21).
- · If you are going to use a wireless LAN, you need to connect the AC adaptor cable only.

# 4

### Install the camera to the rear cover

 $\cdot$ Fix the camera to the rear cover from the sides using four M3 screws.



#### Important

• Take care not to trap the AC adaptor cable and LAN cable when attaching the camera to the rear cover.

### Outdoor Installation



# Insert the AC adaptor cable and the LAN cable through the tube part of the rear cover

- $\cdot$  The procedure is the same as that described in "Indoor Installation" Step 2 on page 18.
- · Insert both cables from below.
- · If you are going to use a wireless LAN, you need to insert the AC adaptor cable only.

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### Installing the Camera (Cont.)

# 2 Connect the AC adaptor cable and LAN cable to the camera

• The procedure is the same as that described in "Indoor Installation" Step 3 on page 19.

### $\boldsymbol{3}$ Attach the camera to the rear cover

- $\cdot$  The procedure is the same as that described in "Indoor Installation" Step 4 on page 19.
- ·Fix the camera to the rear cover from the sides using four M3 screws.

### Important

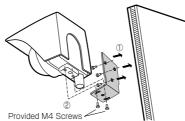
• Take care not to pinch the AC adaptor cable and the LAN cable when attaching the camera to the rear cover.

### 4 Set the Sun visor

·Fix the cover for outdoor installation in place from the rear using four M4 screws.



Mount the camera directly to the wall using the wall bracket (accessory)



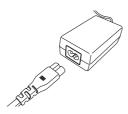
### NOTE

• The screws which attach the wall bracket and the wall are not provided. Choose the best screws for your wall when you buy screws at a store.

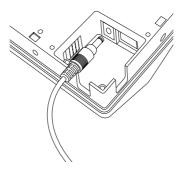


### Connecting the Power Cord

1 Connect the power cord to the AC adaptor



Insert the AC adaptor plug into the camera power terminal



Important

• There is not much space around the opening of the power terminal, so make sure that the plug is properly inserted. The camera may not work properly if the plug is not inserted properly.

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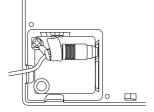
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### **Connecting the Power Cord (Cont.)**

# As shown in the figure below, use a wire clamp to fix the plug in place

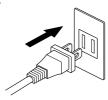
- $\cdot \text{For the wire clamp, use the self-tapping screw supplied with the camera to hold.}$
- · When the plug is fixed in place, check that it will not become disconnected by a moderate amount of pulling.



### Turning on the Power

The camera has no main power switch or button. To turn the power on, insert the plug of the power cord into a power outlet.

Turn the power on after you have installed the camera.



### NOTE

- If you turn the power on without connecting the LAN cable, the network camera starts in wireless LAN mode.
- If you connect the LAN cable and then turn the power on, the network camera starts in ordinary LAN mode.

### Connecting the Camera and Personal Computer by Network

### ■ About the IP Address

To connect to the network, the administrator needs to set the network camera IP address.

There are two options to set the IP address.

- · Obtaining an IP address automatically from the DHCP server
- · Entering an IP address manually (→page 36)
- ●Obtaining an IP address automatically from the DHCP server The "DHCP" setting is set to "ON" by default. This allows you to connect to a network that uses a DHCP server without having to configure any other settings.

Others

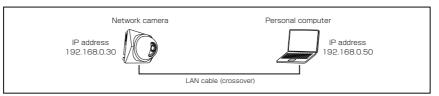
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### Connecting the Camera and Personal Computer by Network (Cont.)

### Using LAN Cable

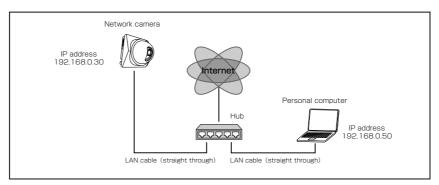
The following shows two different network configurations using a LAN cable connection to operate the network camera.

- · Crossover connection
- · Connection via a hub
- Using a crossover cable to establish a connection (example)



Crossover cable is not provided with the product.

Establishing a connection via a hub (example)



#### NOTE

- You do not need to assign an IP address to a hub.
- The IP address for the camera is specified to 192.168.0.30. Therefore, Set the IP address for your computer to 192.168.0.50 here.
- There will be no problem to use the LAN port of your broadband router instead of using a hub.

However, when using the broadband router, if the DHCP server function is set "ON" and turn on the power after connecting the camera with the router, the camera gets the IP address from the router's DHCP server and it may not be 192.168.0.30.

For more information, read your user's guide for broadband router.

It is also reccomended to set the computer's IP address from the router's DHCP server.

For more information, read your computer's user's guide.



### Using Wireless LAN

The followings show different network configurations using a wireless LAN connection to operate the network camera.

### ■ When using adhoc method

The adhoc method is used for connecting the network camera and a personal computer.

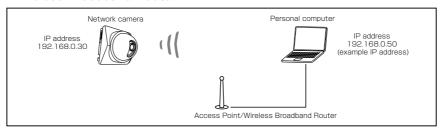


Using a wireless LAN to establish a connection requires the following conditions.

- Both the network camera and the personal computer are on the same network segment.
- 2. Both the network camera and the personal computer use the same communication channel. (→ page 32)
- 3. Both the network camera and the personal computer have the same ESS-ID set. (→ page 32)
- 4. If WEP is used, both the network camera and the personal computer use the same WEP encryption/key. (→ page 33)

### ■ When using infrastructure

Connect the network camera and a personal computer via an Access Point/Wireless Broadband Router.



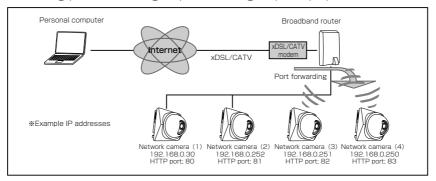
Using an intranet requires the following condition.

• The default gateway is set correctly for the network camera if the network camera will be accessed from different networks.

### Connecting the Camera and Personal Computer by Network (Cont.)

### NOTE

- Information may be intercepted if you use a wireless LAN connection. Improve security by using a WEP key. (→ page 33)
- Communication using a wireless LAN connection is slower compared to that of a wired connection, therefore less image frames can be delivered.
- If you use a wireless LAN connection, the effect of obstructions and distance may result in slower communication speeds and the inability to deliver images. If this is the case, you may be able to achieve slight improvements by decreasing image and file sizes.
  - Using port forwarding to publish images (example)



Using port forwarding to publish images requires the following condition

· Ask your provider if it is possible to have port-forward connection.

### **About Wireless LAN Connection**

There are two methods to establish the wireless LAN connection.

- Cofiguring the wireless network environment for the camera's wireless LAN settings.
- 2. Cofiguring the camera's wireless LAN settings for the wireless network environment.

The default settings of the network camera are as follows:

Network information

Camera name : nwcam01 IP address : 192.168.0.30 Subnet mask : 255.255.255.0

Wireless LAN settings

Connection mode : Adhoc method

ESS-ID : ikwb
Communication channel : Channel 10
WEP : None

# ■ Configuring the wireless network environment for camera's wireless LAN settings

Install a wireless LAN board or wireless LAN card into your personal computer.

### 1) Turn on the power of the camera

### NOTE

 Ensure that the LAN cable is not inserted. If the LAN cable is inserted before plugging in the camera, the network camera does not start in wireless LAN mode.

### 2) Set the IP address of the personal computer

- Set the IP address which you are not using other than 192.168.0.30 (camera's IP address).
  - · Set the IP address to 192.168.0.50 (and subnet mask to 255.255.255.0) as an example.
  - · For details on the procedure, refer to the User's guide of the personal computer.

# 3) Change the wireless LAN settings of the personal computer

- Set the same settings as "Wireless LAN settings" of the network camera.
  - · For details on the procedure, refer to the User's guide of the installed wireless LAN card/board.

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### Connecting the Camera and Personal Computer by Network (Cont.)

# 4) Make sure of the reply from the personal computer to the network camera

- Start a command prompt. Type as "ping 192.168.0.30" and press "Enter" key.
- If the "Reply from..." message appears, the wireless connection is correctly established.
  - If a message other than the above appears, reconfirm that the LAN cable is not connected to another device and reconfirm the settings configured in (2) and (3).
  - · If you can still not ping the camera, connect the personal computer and the camera with a LAN cable and then check the camera's network settings to make sure that the wireless LAN settings are set as described above.
  - · If there is still a problem, contact the Support Center (-> cover page).

# 5) Try viewing camera images with "Camera Finder" (→ page 34)

- a) Start "Camera Finder" and click the "Search" button.
  - Confirm that the camera name "nwcam01" and the IP address "192.168.0.30" are displayed in the camera list.
  - If they are not displayed, perform Step 3) again.
- b) Click camera name to select.
  - Confirm that the camera name and the IP address are displayed in red in the network camera login field.
- c) Click the "Administrator" button.
- d) When the login screen appears, perform the administrator login (→ page 42).
  - If the login screen is not displayed, select "Customize" from the "View menu".
  - In the Customize dialog box, check the Browser setting to see whether a browser has been installed.
    - The following shows the default setting.
       C:\Program Files\Internet Explorer\IEXPLORER.EXE
- e) When the "Admin Menu" screen is displayed, click the "LIVE" button.
  - Images are displayed in single view.
  - If images are not displayed, check whether Java™ 2 is installed on the personal computer.
  - Install Java<sup>™</sup> 2 if it is not installed (→page 12).

### NOTE

 To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.

### ■ Configuring the camera's wireless LAN settings for the wireless network environment

Beforehand, connect the LAN cable (straight cable) to a hub that has the power turned on or connect the LAN cable (crossover cable) to a personal computer that has the power turned on.

- 1) Plug in the camera
- Set the IP address of the personal computer (→page 27)
- 3) Make sure of the reply from the personal computer to the network camera (→ page 27)
- 4) Change the wireless LAN settings of the camera
  - a) Start the "Camera Finder" (→ page 34) and click the "Administrator" button.
  - b) Click "Network Settings" → "Wireless LAN" in the "Admin Menu".
  - c) Configure the settings to match those of the wireless network environment.
    - The communication mode is set to the adhoc method by default. If you are going to view images via an access point or wireless broadband router, be sure to change the communication mode to infrastructure method.
  - d) Click the "Save" button.
  - e) Click the "Reboot" button.

### NOTE

- To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.
- 5) Change the network information of the camera
  - a) Start the "Camera Finder" (→ page 34) and click the "Administrator" button.
  - b) Click "Network Settings" → "General"
  - c) Configure the settings to match those of the wireless network environment.
  - d) Click the "Save" button.
  - e) Click the "Reboot" button.

### NOTE

• To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.

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### Connecting the Camera and Personal Computer by Network (Cont.)

### 6) Plug in the camera

- a) Confirm that the settings are the same as the wireless network environment.
  - When any settings are different from the wireless network environment, set the same values.
- b) Disconnect the LAN cable from the camera.
- c) Unplug the camera once and plug it in again.

### 7) Confirm the camera connection

- a) Ping the IP address set for the camera from a personal computer on the network.
  - Start a command prompt. Type as "ping XXX.XXX.X.XX (IP address set for camera)" and press "Enter" key.
  - If the "Reply from..." message appears, the wireless connection is correctly established.
  - · If a message other than the above appears: Start "Camera Finder" (→ page 34) and try performing a search.

### NOTE

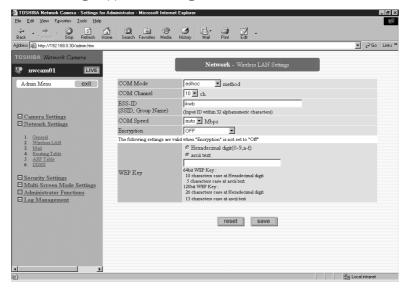
- "Camera Finder" can find the camera even if the IP address of the camera is incorrect (even if the wrong network address is specified).
- Check whether the IP address of the camera found is the one set as your network address.
  - · If "Camera Finder" was unable to find a camera, place the front of the camera close to the antenna of the access point or wireless broadband router and unplug the camera once and plug it again.

### 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 set the IP address. For details on setting the IP address, refer to "About the IP Address" (→ page 23).

- Perform administrator login (→ page 42) to open the Admin menu
- In the left side of the window, click the toggle (+) of "Network Settings"
  - · The sub menus appear.
- $oldsymbol{3}$  From the list of sub menus, click "Wireless LAN"
  - · The settings appear in the right side of the window.

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### Connecting the Camera and Personal Computer by Network (Cont.)



### 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."

### $oldsymbol{5}$ Configure the communication channel

- ①Click ▼ 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 satisfactory wireless connection, try other channels and select the channel that enables the optimal connection.

# 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





### Configure the communication speed

①Click ▼ 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," "11" Mbps, or "auto." It is recommended to select "auto."

### 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, it is recommended to select "auto."



### 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) 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.
- ·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

• 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. When you use encryption with the WEP key for the network camera, select the items for encryption and WEP key correctly.

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### Using the Camera Search Application "Camera Finder"

The camera search application "Camera Finder" is an application for searching network cameras, that can currently be viewed from the administrator's personal computer or a user's personal computer, and connecting to those cameras. You can use this application by downloading it from Toshiba website.

Setting up "Camera Finder"

Access the following Toshiba Web page from the Internet

URL: http://www.netcam.toshiba.com

Create a folder and download the application to the folder

Download the application according to the explanation on the Web page.

- Click the "Setup" file and install the "Camera Finder" following the instruction on the screen
- Using "Camera Finder" to Search for a Camera
- From the Start menu, point to Programs and TOSHIBA Network Camera, and then select Camera Finder
- 2 Start up "Camera Finder" and click "Search"
  - · All the cameras currently connected to the network appear.

    To clear the results, click "Clear".

# Click the camera you want to login from the list of cameras

 $\cdot \text{The chosen camera name and IP}$  address is displayed in the Network camera log-in fields.

To login as an administrator,

Click the "Administrator" button.

· For details on Adminstrator Login procedure, refer to page 42.

To login as a user,

Click the "User" button.

To close the window without logging in

Click "Exit" to close "Camera Finder"

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### NOTE

• Toshiba is not responsible for any damages caused by this software.

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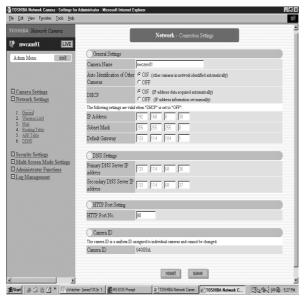
### **Configuring the Network Manually**

### Entering an IP address manually

- · Enter an IP address manually if you are not using, or do not want to use the DHCP server.
- · If you use a 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 able to access to the camera. To be able to access the camera everytime you use, you need to set fixed IP address (setting IP address manually) to the netwark 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 system devices (router, hub, modem, etc.).
- Perform administrator login (→ page 42) to open the Admin menu.
- In the left side of the window, click the toggle (+) of "Network Settings"
  - · The sub menus appear.
- $oldsymbol{3}$  From the list of sub menus, click "General"
  - · The settings appear in the right side of the window.



#### Enter the camera name



#### Important

 The camera name is displayed along with images in single view or multi view screens. 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."



## 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 the relevant network system administration support center.

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Operation

#### Configuring the Network Manually (Cont.)

## Click the save button

· The settings are registered.

#### NOTE

- Clicking the reset button restores the previous configuration.
- The network camera has a feature (useful for multi view) that 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 50).
- For details on configuring multi view, refer to "Multi-Screen Mode Settings" (→ page 55).

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Operation

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### Log-in ID and Password

Be sure to change the default login ID and password. You are able to change important information and settings of the camera through the Administrator Login. To have higher security, be sure to change your login ID and the password, and don't forget new login ID and password. Otherwise, you cannot access to the camera. In the case you forget your login ID and password, press "Reset" button ( $\rightarrow$  page 14, 15) for more than 5 seconds. It will return to the default setting, but remember, in this case, all the information and settings will be gone.

The default login ID is "root" and the default password is "ikwb".

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

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



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



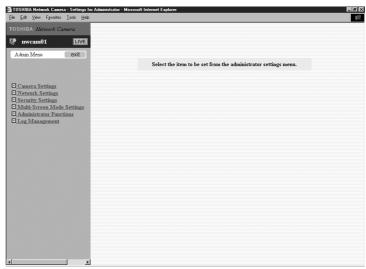
· "Admin Menu" screen appears.

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Log-in ID and Password (Cont.)

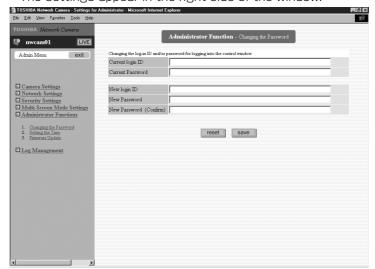
In the Admin menu, click the toggle (+) of "Administrator Functions"

· The sub menus appear.



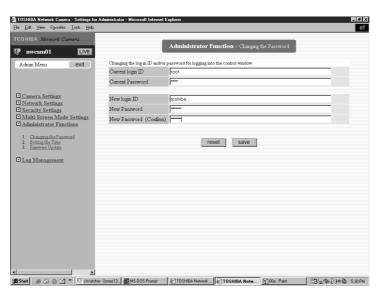
4 Click "Changing the Password"

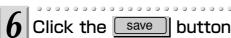
· The settings appear in the right side of the window.





Enter the login ID and password in the "Current Login ID", "Current Password", "New Login ID", "New Password", and "New Password (Confirm)" fields.





· The new login ID and password are saved in the network camera.

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### **Administrator Operation**

The viewing of images and operating of 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 and operate cameras is explained after the following administrator login procedure explanation.

For details on "user login", refer to the Advanced User's Guide.

#### 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.

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

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



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

· "Admin Menu" screen appears.

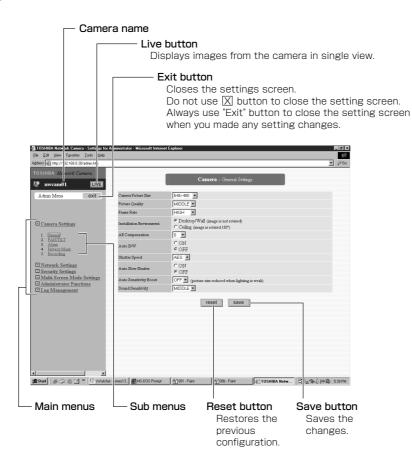


# Installation/Setup

Others

### **Screen Part Names and Functions**

#### ● Admin Menu Screen



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#### **Screen Part Names and Functions (Cont.)**

Sound button

#### Single View

Switches sound on/off.

Camera name

**Alarm Notification** Displayed when an alarm is detected.

SD memory card (IK-WB11A)

Indicates SD memory card is in use.

#### Multi View button

Switches the display to multi view. The button is shown only when the multi viewfunction is set "ON".

Controller button

Displays the controller.

Image magnification Indicates the

magnification of camera images.

#### Time and date

Displays the current time and date of the network camera being accessed.

#### LIVE/PLAYBACK

LIVE: Displaying live image PLAYBACK: Displaying recorded image

#### Multi View

All the buttons and icons, except the button for switching views, function the same as those of single view.

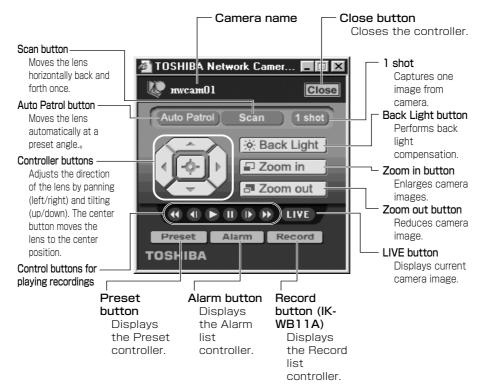


#### Single View button

Displays the upper left screen in single



#### Administrator Controller



\*The network camera also has "User's controller". For the details, see Advanced User's Guide.

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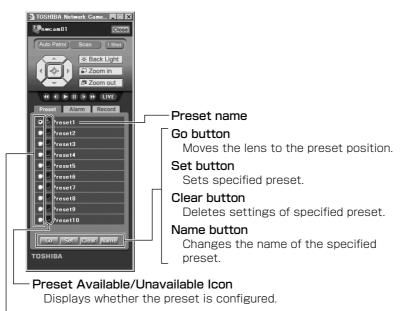
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## Others

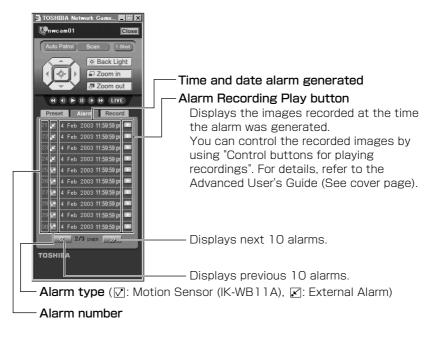
#### **Screen Part Names and Functions (Cont.)**

#### Preset controller



#### Alarm list controller

Preset Selection button Specifies preset.

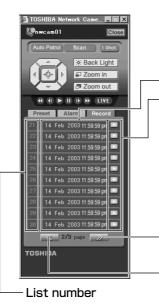


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#### ● Record list controller (IK-WB11A)



#### Time and date of recording

#### Play button

Displays the images recorded at a time when there are no abnormalities. You can control the recorded images by using "control buttons for playing recordings". For details, refer to the Advanced User's Guide (See cover page).

Displays next 10 recordings.

Displays previous 10 recordings.

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## **Setting Items**

For more details on the settings, please refer to the Advanced User's Guide at <a href="http://www.netcam.toshiba.com">http://www.netcam.toshiba.com</a>.

#### ■ 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	1	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	HIGH/MIDDLE/LOW

<sup>\*1:</sup> Auto-Slow shutter functions when the "shutter speed" is set "AES".

#### 2. PAN/TILT Settings

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

#### 3. Alarm Settings

#### 1) External Alarm

Item	IK-WB01A	IK-WB11A
Function	ON/OFF	ON/OFF
Input Type	Normal Closed (NC)/	Normal Closed (NC)/
	Normal Opened (NO)	Normal Opened (NO)
Associate to P/T	OFF, Preset,Auto Patrol	OFF, Preset,Auto Patrol
Operation		
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 (See Advanced User's Guide)
Associate to P/T	_	OFF, Preset, Auto Patrol
Operation		
Preset No	_	1 to 10
Resume Function	_	ON/OFF
Resume Time	_	10, 30, 60 seconds

#### 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 (See Advanced User's Guide)

<sup>\*\*</sup> 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, 2, 5, 10 seconds	1, 2, 5, 10 seconds

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

Item	IK-WBO1A	IK-WB11A
Function	_	ON/OFF
Recording Cycle	_	1*, 2, 5, 10, 30, 60, 120,
		180 seconds
Timer Association	_	ON/OFF

<sup>\*</sup> lamge can be recorded with 1 second-recording cycle when picture sizes are  $160\times120,\,320\times240,\,640\times480$ : 2 seconds-recorded cycle when picture sizes are  $800\times600,\,1280\times960$ .

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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.

#### ■ Network Settings

- 1. Network Connection Settings
  - 1) General Settings

Item	IK-WB01A	IK-WB11A
Camera Name	Enter up to 32 single-byte	Enter up to 32 single-byte
	characters	characters
Auto Identification of	ON/OFF	ON/OFF
Other Cameras		
DHCP	ON/OFF	ON/OFF
IP Address	Enter the static IP	Enter the static IP
	address	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	Enter the IP address	Enter the IP address
IP Address		
Secondary DNS	Enter the IP address	Enter the IP address
Server 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

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#### 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	64 bit: 10 characters
	(hexadecimal digits),	(hexadecimal digits),
	5 characters (ASCII text)	5 characters (ASCII text)
	128 bit: 26 characters	128 bit: 26 characters
	(hexadecimal digits),	(hexadecimal digits),
	13 characters (ASCII text)	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	Enter up to 128 single-	Enter up to 128 single-
Messages	byte characters	byte characters

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

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

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

6) Attached Picture Size Setting

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

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

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

8) Conditions for Sending Mail When IP Address Is Changed

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

#### 9) Addresses for Sending Mail (To)

Item	IK-WB01A	IK-WB11A
Input fields for up to	· Enter the mail addresses	· Enter the mail addresses
10 addresses (To)	· For each address, you can	· For each address, you can
	configure individually	configure individually
	whether mail is sent when:	whether mail is sent when:
	an external alarm goes off,	an external alarm goes off,
	the internal battery runs	the internal battery runs
	out of power, or the IP	out of power, or the IP
	address is changed	address is changed

- $\boldsymbol{\ast}$  There is a function for sending a test message.
- 10) Addresses for Sending Mail (Cc)

Item	IK-WB01A	IK-WB11A
Input fields for up to	· Enter mail addresses	· Enter mail addresses
10 addresses (Cc)	· For each address, you can	· For each address, you can
	configure individually	configure individually
	whether mail is sent when:	whether mail is sent when:
	an external alarm goes off,	an external alarm goes off,
	the internal battery runs	the internal battery runs
	out of power, or the IP	out of power, or the IP
	address is changed	address is changed

- \* There is a feature for sending a test message.
- 4. Routing Table Settings

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

- 5. ARP Table Settings
  - 1) Static ARP Table Settings

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

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#### 2) Browse ARP Table

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

\* Clicking the clear 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	Enter the server
	name	name

#### ■ Security Settings

#### 1. Access Restriction Settings

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

#### 2. Filtering Settings

Item	IK-WB01A	IK-WB11A
Filtering by MAC	ON/OFF	ON/OFF
Address		
MAC Address	Enter up to ten MAC	Enter up to ten MAC
	addresses	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	Enter the camera name	Enter the camera name
Cameras	and IP address	and IP address

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#### 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	Select cameras that were registered	Select cameras that were registered
for Multi-screen	by searching automatically or by	by searching automatically or by
Display	using the administrator function for	using the administrator function for
	adding cameras	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	Reenter the password	Reenter the password
(Confirm)		

#### 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	Select a date from the
	date boxes	date boxes
Time	Select a time from the	Select a time from the
	time boxes	time boxes

3) Changing the Time Using an NTP Server Setting

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

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- 4) Quick Time Setting5) Daylight saving setting

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

3. Updating Firmware

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

#### ■ Log Management

1. Forwarding Settings

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

2. Browse and Delete Settings

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

## 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)	1 lx (Normal, Auto-Sensitivity Boost OFF)
	0.7lx (Frame Rete LOW)	0.03 lux (Slow shutter ON)
Pan	112° (-56	6° to 56°)
Tilt	54° (-49	9° to 5°)
Pan/tilt presets		sitions
Alarm terminal	Input $\times$ 1, (	Output × 1
Image size	640×480 320×240 160×120	1280×960 800×600
		640×480 320×240 160×120
Image compression method	JP	EG
Quality settings	3 le	vels
Maximum frame rate	Max. 7.5 fps(640x480),	Max. 7.5 fps(1280x960, 800x600, 640x480),
	Max. 15 fps(320x240zoom, 160x120zoom)	Max. 30 fps(320x240, 160x120)
Audio *1	Available (buit-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, D	OHCP, NTP, ARP, ICMP, syslog, DDNS
Power supply voltage	10V DC	
Power consumption	8'	
Operating ambient	Temperature: 0°C to +40°C/	
temperature/humidity	Humidity: 80% or less	
Storage temperature	-20℃ to +60℃	
Weight	Approx. 600 g (camera only)	Approx. 650 g (camera only)
External dimensions	. , , , , ,	0 (D)mm (camera only)
Accessories	AC adaptor (1), Power cord (1), Wall attachment (for indoor use) (1), Clamp filter(x2) Screw set, User's Guide, Quick Start Guide, LAN cable (Straight-through cable)(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, User's Guide, Quick Start Guide, LAN cable (Straight-through cable)(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 deliverd, 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.
- Designes as specifications may change without prior notice for better improvement.

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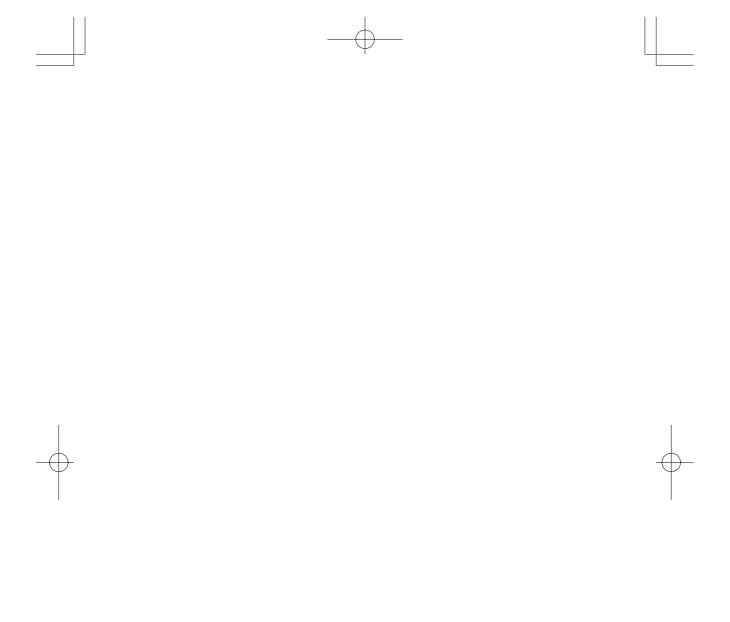
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#### TOSHIBA AMERICA INFORMATION SYSTEMS. INC

Imaging System Division 9740 Irvine Boulevard, Irvine California 92618-1697 PhoneNumber: (800)288-1354

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One (1) Year Limited Warranty of Labor and Parts ISD warrants that this Product will perform in accordance with specifications for a period of one (1) year from the date of purchase by Original End-User. During this one (1) year period, ISD will repair or replace the Product, if it does not perform as warranted. In order to take advantage of this Limited Warranty, You must: (a) deliver the Product to an ISD Authorized Service Provider ("ASP"): and (b) pay all transportation and insurance charges for shipment of the Product to the ASP. ISD reserves the right to substitute factory refurbished parts in place of those

User's Guide (User's manual): You should read the User's Guide (User's manual) thoroughly before operating this Product. Before seeking warranty service, you should check the troubleshooting guide in the User's Guide (User's manual) and follow the instructions to correct the problem.

How to Obtain Warranty Service Step-by-step Procedures: To obtain warranty service, You should: 1. Contact Toshiba at (877) 855-1349 for operation or installation assistance. 877-MYNETCAM

- Call 877-696-3822. A technical support specialist will help diagnose the problem. If the product requires a hardware repair, Toshiba will refer an ASP who will repair or at Toshiba's discretion, replace the product.
   Arrange for shipment of the Product to a Toshiba Authorized Service Provider.
   Securely pack the Product in the original carton and external shipping pack, include a letter explaining the problem with a
- copy of the bill of sale or proof of purchase.

  5. Prepay all transportation and insurance costs.

Questions? If you have any questions, please check our web site at http://www.netcam.toshiba.com

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  1. You must provide the bill of sale or proof of purchase at the time that warranty service is required.
- You must notify an ASP within thirty (30) days after you discover that the product does not perform in accordance with specifications during the Limited Warranty period.
   All Warranty Service of this product must be by an ISD Authorized Service Provider.
   You must pack the Product in its original carton using the original packing material. Then insert the original carton containing
- the Product into another carton with additional packing material before shipping the Product to an ASP

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