

## **INSTRUCTION MANUAL**

# CCD COLOR CAMERA

Please read this manual thoroughly before use, and keep it handy for future reference.

Record in space provided below the Model No. and the Serial No. as found on the label on the bottom of this unit.

Model. No. <u>IK-6550A</u> Serial No.\_\_\_\_\_ Retain this information for future reference.

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## **IMPORTANT SAFEGUARDS**

#### 1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

#### 2. Retain Instructions

The safety instructions and instruction manual should be retained for future reference.

#### 3. Comply Warning

Comply with all warnings on the product and in the instruction manual.

#### 4. Follow Instructions

Follow all operating and use instructions.

#### 5. Cleaning

Disconnect this video product from the power supply before cleaning.

#### 6. Attachments

Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

#### 7. Water and Moisture

Do not use this video product near water. Some examples are: near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

#### 8. Accessories

Do not place this video product on an unstable cart, stand, tripod, bracket or table. The video product may fall, causing serious injury to a person, or serious damage to the product. Use only with stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

#### 9. Ventilation

This video product should never be placed near or over a radiator or heat register. If this product is placed in a built in installation verify that there is proper ventilation so that the camera temperature operates within the recommended temperature range.

#### **10.Power Sources**

This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your product dealer.

#### **11.Power-Cord Protection**

Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, screws and the point where they exit the product.

#### 12.Installation

Install this video product on a firm and solid part of the ceiling or wall. If installed on a weak place the camera could fall causing injury and damage.

#### 13.Lightning

For additional protection on this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the power supply and cable system. This will prevent damage to the video product due to lightning and power-line surges. If lightning occurs, do not touch the unit or any connected cables in order to avoid electric shock.

#### 14.Overloading

Do not overload the power supply or extension cords as this can result in a risk of fire or electric shock.

#### 15.Object and Liquid Entry

Never push objects of any kind into this video product through openings as they may touch dangerous electrical points or short-out parts that could result in a fire or electrical shock. Never spill liquid of kind on the video product.

#### 16.Servicing

Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous. Electrical or other hazards. Refer all servicing to qualified service personnel.

#### 17.Damage Requiring service

Disconnect this video product from the power supply and refer servicing to qualified service personnel under the following conditions.

a. When the power-supply cord or plug is damaged.

b. If liquid has been spilled, or objects have fallen into the video product.

c. If the video product has been exposed to rain or water.

d. If the video product does not operate normally by following the operating instructions in the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.

e. If the video product has been dropped or the cabinet has been damaged.

f. When the video product exhibits a distinct change in performance-this indicates a need for service.

#### **18. Replacement Parts**

When replacing parts be sure the service technician uses parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

#### 19.Safety Check

Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.





• The CAUTION label, shown on the left, is attached on the camera.

CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightening flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### WARNING :

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### CAUTION :

CONNECT 24V AC UL LISTED CLASS 2 POWER SUPPLY.

FIELD INSTALLATION MARKING : THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO ALL LOCAL CODES.

#### FCC (USA)-INFORMATION

**NOTE**: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**USER-INSTALLER CAUTION**: Your authority to operate this FCC verified equipment could be voided if you make changes or modifications not expressly approved by the party.

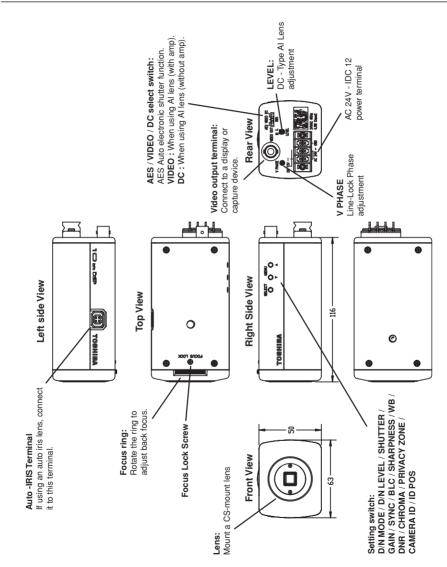
## 1. FEATURES & DESCRIPTION

- 1.24V AC/12V DC dual-voltage capable extends power choice.
- 2. Setting and adjustments are made by way of on-screen menu. (Menu Driven Set-Up)
- 3. Camera has the ability to automatically switch the display to color in daylight or black and white at night.
- 4. Camera synchronization mode is selectable between internal and line-lock.
- 5. The shutter speed is automatically adjusted according to the subject brightness.
- 6. Back Light Compensation (BLC) adjusts for strong backlight conditions.
- 7. White balance is automatically adjusted depending on color temperature variations (AWB)
- 8. Easy back focus adjustment for an easy installation.
- 9. Built in 1/3 inch high resolution CCD.
- 10. Minimum illumination of 0.2 lux at F1.2. (GAIN : HIGH)
- 11. S/N ratio of 50dB. (With DNR)
- 12. Horizontal resolution of 540 TV lines.

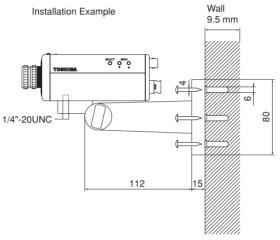
## 2. COMPONENTS

Camera	1
(a) Lens Connector	
(b) Instruction Manual	1
(c) Lens Cap	1
	(b) Instruction Manual

## 3. PART NAMES & FUNCTIONS



## 4. CAMERA INSTALLATION



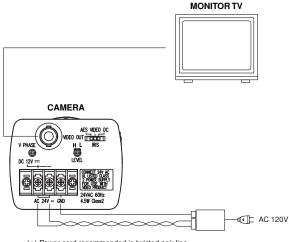
The installation guide is for reference only. Mounting backet is not included.

## 5. CONNECTIONS AND OPERATIONS

#### Notes on connecting

- Power plugs of connected equipment must be disconnected before installations.
- A 75-ohm coaxial cable with connector (3C-2V or 5C-2V) is required for standard connection.
- For details of wiring and operation of equipment to be connected, refer to their operation manuals.
- Lens, power supply with cable, connectors and coaxial cable are not supplied with the camera.

## 5-1. Basic connection Single system configuration



(\*) Power cord recommended is twisted pair line with a minimum wire size of 18 AWG.

24V AC UL Listed Class 2 power supply / 12V DC power supply

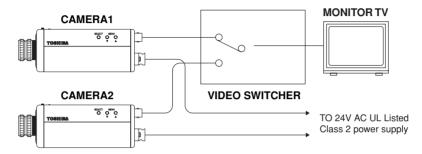
CAUTION: Never input 24V AC and 12V DC at the same time.

#### Do not overload power supply

The recommended power supplies for this camera are 6 watt minimum for each 24V AC UL Listed Class 2 power supply or 12V DC power supply.

## 5-2. Line-Lock Control

- Matching the vertical synchronization with the power frequency is called the Line-Lock.
- This function is activated when the SYNC menu is selected to LL.
- When two or more cameras are switched by the video switcher for viewing by a monitor TV, the vertical sync. phase can be locked with the power frequency, and a stable vertical sync. is obtained without being disturbed at the time of switching.



#### Note:

- The camera is synchronized to the power frequency of 60 ±1 Hz covering a normal fluctuation of the power frequency. However, the camera may not cover a large fluctuation caused from the power generated by an engine generator, etc.
- It takes about 10 seconds or more until a stable synchronization is obtained after the power is turned on. This is normal, because several seconds are required to stabilize the camera against power noise.
- Refer to "7. LINE-LOCK PHASE" for adjustment.

## 5-3. Operation

- 1. Mount the lens to the camera.
- 2. Mount the camera to the camera mount.
  - Caution: If the lens weight is more than 2.2 lbs (1 kg) mount the lens to the camera mount. Refer to section 6 for lens types and connection.
- 3. Connect the cables and support equipment to obtain a picture.
- 4. Adjust the lens aperture (if applicable).

## 6. LENS

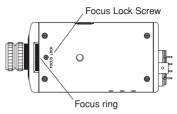
### **Back-Focus Adjusment**

Back-Focus is adjusted at the factory to accommodate most standard lenses.

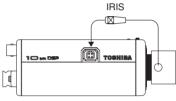
However, at times, slight adjustment to the IK-6550A backfocus is necessary.

Loosen the Focus Lock Screw. Achieve a clear image by rotating the focus ring.

Afterwards, tighten the Focus Lock Screw.

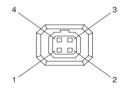


This camera supports two types of auto-iris lens: Videotype and DC (direct drive) types. Connect the auto-iris connector plug to the IRIS terminal on the side of the camera. Refer to the chart below for correct wiring and set up.



Auto-iris lens

	Video IRIS Lens	Direct Drive IRIS Lens
	1. +12V	1. Damp – (y)
IRIS terminal	2. NC	2. Damp + (γ)
pin	3. VIDEO	3. Driver + (wh)
	4. GND	4. Driver – (g)
IRIS Switch	VIDEO position	DC Position

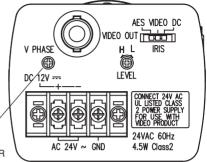


## 7. LINE-LOCK PHASE

If two or more cameras within a system have different AC line phases are switched by the video switcher, the picture on the monitor TV will fluctuate vertically.

Connect 24V AC input lines of all cameras so that they all share the same phase.

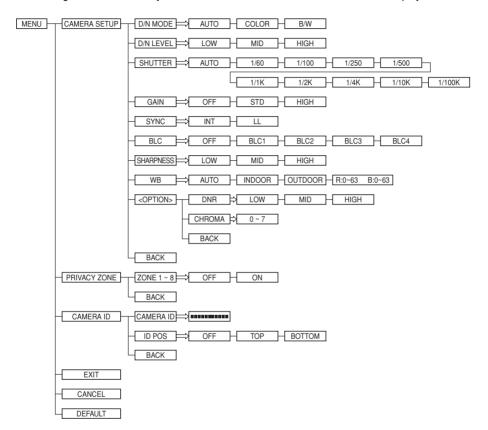
If you still have vertical fluctuation, adjust the V.PHASE controller.



V. PHASE CONTROLLER

## 8. MENU-DRIVEN SET-UP

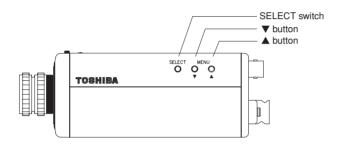
The setting menus of hierarchy are shown below and with on-screen character displays.



## 8-1. Setting switches and the functions

On the side panel of the cameras there are three push button switches as shown below:

Switch name	Main function
SELECT switch	Setting mode call on/off, setting entry
▼ button	Setting item selection (down)
▲ button	Setting item selection (up)



## 8.2 Setting mode call and basics

#### <CAMERA SETUP>

Press the SELECT switch down about 2 seconds then menu will appear on the display.

Use the  $\blacktriangle$   $\checkmark$  buttons to select <CAMERA SETUP>.

▷ <CAMERA SETUP> <PRIVACY ZONE> <CAMERA ID> EXIT CANCEL DEFAULT

#### 8-2-1. D/N MODE (DAY/NIGHT MODE)

Selections:

AUTO (default): The camera will sense the brightness		
	level and switches to color mode or	
	monochrome mode.	
COLOR:	Color mode	
B/W:	Monochrome mode	

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor (>) next to D/N MODE and press the SELECT switch to access menu.
- 3. Use the  $\blacktriangle$   $\checkmark$  buttons to select AUTO, COLOR or B/W.
- 4. Press the SELECT switch to accept the selection.

D/N MODEAUTOD/N LEVELLOWSHUTTERIRISGAINSTDSYNCINT
SHUTTER IRIS GAIN STD
GAIN STD
SYNC INT
BLC OFF
SHARPNESS MID
WB AUTO
<option></option>
BACK

#### 8-2-2. D/N LEVEL (DAY/NIGHT LEVEL)

Selections:

LOW (default): The chroma cut level is set less than
20 to 30 IRE.

MID: The chroma cut level is set less than 30 to 40 IRE.

HIGH: The chroma cut level is set less than 40 to 50 IRE.

Process:

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor ( $\triangleright$ ) next to D/N LEVEL and press the SELECT switch to access menu.
- 3. Use the ▲ ▼ buttons to select LOW, MID or HIGH.
- 4. Press the SELECT switch to accept the selection.
- Note: The camera will switch to black and white sooner at the high level than at the low level.

#### 8-2-3. SHUTTER (Exposure time)

Selections:

AUTO(AES)

Exposure time is controlled automatically within a range of 1/60 sec. to 1/100,000 sec. to obtain an adequate signal.

1/60,1/100,1/250,1/500,1/1K, 1/2K, 1/4K, 1/10K, 1/ 100K (MES).

When the rear panel switch is set to VIDEO or DC the exposure time is fixed 1/60 sec. and shutter mode turn to IRIS(default).

- 1. Set the Iris slide switch, located on the rear of the camera, to the AES position.
- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 3. Position the cursor (▷) next to SHUTTER and press the SELECT switch to access menu.
- Use the ▲ ▼ buttons to choose the shutter speed from AUTO through 1/100K.
- 5. Press the SELECT switch to accept the selection.

D/N MODE	AUTO
D/N LEVEL	LOW
SHUTTER	IRIS
GAIN	STD
SYNC	INT
BLC	OFF
SHARPNESS	MID
WB	AUTO
<option></option>	
BACK	

D/N MODE	AUTO
D/N LEVEL	LOW
SHUTTER	IRIS
GAIN	STD
SYNC	INT
BLC	OFF
SHARPNESS	MID
WB	AUTO
<option></option>	
BACK	

#### 8-2-4. GAIN (AGC)

Selections:

OFF:	AGC does not operate.
STD (default):	Standard position, max gain = 24dB
HIGH:	High-Sensitivity position, max gain =
	30dB

Process:

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor (>) next to GAIN and press the SELECT switch to access menu.
- 3. Use the  $\blacktriangle$   $\checkmark$  buttons to select OFF, STD or HIGH.
- 4. Press the SELECT switch to accept the selection.
- Note: When using in low light condition, set this selection to the HIGH position.

#### 8-2-5. SYNC

Selections:

- INT (default): The camera is in the internal SYNC mode.
- LL: The camera is in the Line-Lock Mode. Line-Lock phase is set 0 to 300 degree by adjusting the V phase. Refer to 5. Connections and Operations.

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor ( $\triangleright$ ) next to SYNC and press the SELECT switch to access menu.
- 3. Use the  $\blacktriangle$   $\checkmark$  buttons to select INT or LL.
- 4. Press the SELECT switch to accept the selection.

ſ	D/N MODE	AUTO
	D/N LEVEL	LOW
	SHUTTER	IRIS
	⊳GAIN	STD
	SYNC	INT
	BLC	OFF
	SHARPNESS	MID
	WB	AUTO
	<option></option>	
	BACK	

D/N MODE	AUTO
D/N LEVEL	LOW
SHUTTER	IRIS
GAIN	STD
⊳SYNC	INT
BLC	OFF
SHARPNESS	MID
WB	AUTO
<option></option>	
BACK	

#### 8-2-6. BLC (BACK LIGHT COMPENSATION)

Selections:

When using the automatic electronic iris with an auto iris lens, the exposure adjustment is automatically performed so that the best picture is obtained at the next monitor zone.

The four different BLC zones are displayed below:

Process:

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor ( $\triangleright$ ) next to BLC and press the SELECT switch to access menu.
- 3. Use the ▲ ▼ buttons to select BLC1, BLC2, BLC3, BLC4 or OFF (default).
- 4. Press the SELECT switch to accept the selection.

AUTO
LOW
IRIS
STD
INT
OFF
MID
AUTO

OFF	BLC1	BLC2	BLC3	BLC4
Video monitor				

Note: Use this function if there is intense light in the area outside the zone.

#### 8-2-7. SHARPNESS

Selections:

Adjust the outline correction.

LOW: to make the outline softer.

MID (default): to make the outline standard.

HIGH: to make the outline clearer

#### Process:

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor (⊳) next to SHARPNESS and press the SELECT switch to access menu.
- 3. Use the  $\blacktriangle$   $\blacktriangledown$  buttons to select LOW, MID or HIGH.
- 4. Press the SELECT switch to accept the selection.

#### 8-2-8. WB (WHITE BALANCE)

#### Selections:

- AUTO (default): The white balance is automatically adjusted corresponding to the color temperature variations on the object. The color temperature application is between 2500K and 10000K.
- INDOOR: The white balance is fixed at the color temperature of 3200K.
- OUTDOOR: The white balance is fixed at the color temperature of 5100K.
- R: 0-63 B: 0-63: Press the SELECT switch to enter manual set mode. Using ▲ ▼ buttons to adjust R Gain & B Gain to have a good white balance. Press the SELECT switch to leave the manual set mode.

> SHARPNESS WB <option> BACK</option>	MID AUTO

ALITO

IOW

IRIS

STD

INT

OFF

D/N MODE

D/N I EVEI

SHUTTER

GAIN

SYNC

BI C

D/N MODE	AUTO
D/N LEVEL	LOW
SHUTTER	IRIS
GAIN	STD
SYNC	INT
BLC	OFF
SHARPNESS	MID
⊳wb	AUTO
<option></option>	
BACK	

- 1. Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor ( $\triangleright$ ) next to WB and press the SELECT switch to access menu.
- 3. Use the ▲ ▼ buttons to select AUTO, INDOOR, OUTDOOR or R: 0-63 B: 0-63.
- 4. Press the SELECT switch to accept the selection.

#### 8-2-9. <OPTION>

(1) DNR (DIGITAL NOISE REDUCTION)

Selections:

LOW: Enables minimum noise reduction. MID (default): Enables standard noise reduction. HIGH: Enables maximum noise reduction.

#### Process:

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor (⊳) next to OPTION and press the SELECT switch to access menu.
- 3. Position the cursor (⊳) next to DNR and press the SELECT switch to access menu.
- 4. Use the ▲ ▼ buttons to select LOW, MID or HIGH.
- 5. Press the SELECT switch to accept the selection.

#### (2) CHROMA

Selections:

The chroma setting is for color gain. Increasing the number will increase the color. Choose the CHROMA from 0 to 7 (default = 3).

- Position the cursor (▷) next to CAMERA SETUP and press the SELECT switch to access the camera menu.
- 2. Position the cursor (⊳) next to OPTION and press the SELECT switch to access menu.
- 3. Position the cursor (▷) next to CHROMA and press the SELECT switch to access menu.
- Use the ▲ ▼ buttons to set the CHROMA from 0 to 7.
- 5. Press the SELECT switch to accept the setting.

⊳dnr	MID
CHROMA	3
BACK	

DNR	MID	
CHROMA	3	
BACK		
DAON		

#### (3) BACK

Position the cursor ( $\triangleright$ ) next to BACK and press the SELECT switch to exit OPTION menu.

DNR	MID	
	3	
BACK		

#### 8-2-10. BACK

Position the cursor (⊳) next to BACK and press the SELECT switch to exit CAMERA SETUP menu.

D/N MODE	AUTO	
D/N LEVEL	LOW	
SHUTTER	IRIS	
GAIN	STD	
SYNC	INT	
BLC	OFF	
SHARPNES	SS MID	
WB	AUTO	
<option></option>		
BACK		

#### 8-2-11. <PRIVACY ZONE>

Press the SELECT switch down about 2 seconds then menu will appear on the display.

Use the ▲ ▼ buttons to select <PRIVACY ZONE>.

Process:

- 1. Position the cursor (>) next to PRIVACY ZONE and press the SELECT switch to access the menu.
- 2. Position the cursor ( $\triangleright$ ) next to ZONE 1  $\sim$  8 and press the SELECT switch to access menu.

▷ZONE 1	OFF	
ZONE 2	OFF	
ZONE 3	OFF	
ZONE 4	OFF	
ZONE 5	OFF	
ZONE 6	OFF	
ZONE 7	OFF	
ZONE 8	OFF	
BACK		

Use the ▲ ▼ buttons to select ON and press the SELECT switch.

The mark will appear on the display.

OFF	
•••	
•••	
•••	
OFF	
	OFF OFF

4. Use the ▲ ▼ buttons to set ZONE POSI (H) and press the SELECT switch.

▷ZONE 1	OFF		
ZONE 2	OFF		
ZONE 3	OFF		
ZONE 4	OFF		
ZONE 5	OFF		
ZONE 6	OFF		
ZONE 7	OFF		
ZONE 8	OFF		
BACK			
ZONE POSI(H)			

5. Use the ▲ ▼ buttons to set ZONE POSI (V) and press the SELECT switch.

▷ZONE 1	OFF	
ZONE 2	OFF	
ZONE 3	OFF	
ZONE 4	OFF	
ZONE 5	OFF	
ZONE 6	OFF	
ZONE 7	OFF	
ZONE 8	OFF	
BACK		
	ZONE POSI(V)	
	. ,	

6. Use the ▲ ▼ buttons to set ZONE SIZE (H) and press the SELECT switch.

≥ZONE 1	OFF	
ZONE 2	OFF	
ZONE 3	OFF	
ZONE 4	OFF	
ZONE 5	OFF	
ZONE 6	OFF	
ZONE 7	OFF	
ZONE 8	OFF	
BACK		
	ZONE SIZE(H)	

7. Use the ▲ ▼ buttons to set ZONE SIZE (V) and press the SELECT switch.

≥ZONE 1 ZONE 2	OFF OFF	
ZONE 3	OFF	
ZONE 4	OFF	
ZONE 5	OFF	
ZONE 6	OFF	
ZONE 7	OFF	
ZONE 8	OFF	
BACK		
	ZONE SIZE(V)	

#### 8-2-12. BACK

Position the cursor (▷) next to BACK and press the SELECT switch to exit PRIVACY ZONE menu.

ZONE 1	OFF	
ZONE 2	OFF	
ZONE 3	OFF	
ZONE 4	OFF	
ZONE 5	OFF	
ZONE 6	OFF	
ZONE 7	OFF	
ZONE 8	OFF	
⊳BACK		

#### <CAMERA ID>

Press the SELECT switch down about 2 seconds then menu will appear on the display. Use the ▲ ▼ buttons to select <CAMERA ID>.

<CAMERA SETUP> <PRIVACY ZONE> ><CAMERA ID> EXIT CANCEL DEFAULT

#### 8-2-13. CAMERA ID

Position the cursor ( $\triangleright$ ) next to CAMERA ID and press the SELECT switch to access the CAMERA ID menu. Position the cursor ( $\triangleright$ ) next to CAMERA ID and press the SELECT switch.

Use the  $\blacktriangle$   $\bigtriangledown$  buttons, to name each camera up to 16 characters.

Press the SELECT switch to accept the selection.

Font list 0,1,2,3,4,5,6,7,8,9 A,B,C,D,E,F,G,H,I,J,K,L,M, N,O,P,Q,R,S,T,U,V,W,W,Y,Z < > - .,:; / ■ (SPACE) D CAMERA ID ID POS OFF BACK

#### 8-2-14. ID POS (ID POSITION)

Selections:

OFF (default): Disappear the CAMERA ID.

- TOP: Show the ID position top-left of screen.
- BOTTOM: Show the ID position bottom-left of screen.

#### Process:

- Position the cursor (▷) next to CAMERA ID and press the SELECT switch to access the camera menu.
- 2. Position the cursor (⊳) next to ID POS and press the SELECT switch to access menu.
- 3. Use the ▲ ▼ buttons to select OFF, TOP or BOTTOM.
- 4. Press the SELECT switch to accept the selection.

#### 8-2-15. BACK

Position the cursor ( $\triangleright$ ) next to BACK and press the SELECT switch to exit CAMERA ID menu.

CAMERA ID		
DID POS BACK	OFF	
Briote		

ſ	CAMERA		
	ID POS ▷BACK	OFF	

#### 8-2-16. EXIT (save the changed settings)

Position the cursor ( $\triangleright$ ) next to EXIT and press the SELECT switch to exit menu.

<camera setup=""></camera>
<privacy zone=""></privacy>
<camera id=""></camera>
EXIT CANCEL DEFAULT

#### 8-2-17. CANCEL (discard the changed settings)

Position the cursor ( $\triangleright$ ) next to CANCEL and press the SELECT switch twice to load cancel settings.

<CAMERA SETUP> <PRIVACY ZONE> <CAMERA ID> EXIT DCANCEL DEFAULT

#### 8-2-18. DEFAULT (return all settings to factory default)

Position the cursor (>) next to DEFAULT and press the SELECT switch twice to load to factory default.

<CAMERA SETUP> <PRIVACY ZONE> <CAMERA ID> EXIT CANCEL ▷DEFAULT

## 9. MENU LIST AND SETTINGS

Top Menu	Sub Menu 1	Sub Menu 2	Contents	Default
CAMERA SETUP	D/N MODE		AUTO / COLOR / B/W	AUTO
	D/N LEVEL		LOW / MID / HIGH	LOW
	SHUTTER		IRIS AUTO / 1/60 1/100 1/250 1/500 1/1K 1/2K 1/4K 1/10K 1/100K	IRIS
	GAIN		OFF / STD / HIGH	STD
	SYNC		INT / LL	INT
	BLC		OFF / BLC1 / BLC2 / BLC3 / BLC4	OFF
	SHARPNESS		LOW / MID / HIGH	MID
	WB		AUTO / INDOOR / OUTDOOR / R:0~63 B:0~63	AUTO
	OPTION	DNR	LOW / MID / HIGH	MID
		CHROMA	0~7	3
PRIVACY ZONE	ZONE 1~8		OFF / ON	OFF
CAMERA ID	CAMERA ID		16 characters	All Blank
	ID POS		OFF / TOP / BOTTOM	OFF

## **10. NOTES ON USE AND INSTALLATION**

#### Do not aim the camera at the sun

Never aim the camera at the sun even with the camera power off.

#### · Do not shoot intense light

Intense light such as a spotlight may cause a bloom or smear. A vertical stripe may appear on the screen. However, this is not a malfunction.

#### · Treat the camera with care

Do not drop the camera or subject it to strong shock of vibration.

#### · Never touch internal parts

Do not touch the internal parts of the camera other than the parts specified.

#### · Do not splash water on the camera

Install the camera where the camera can be kept dry. If the camera gets wet, turn off the power and contact your dealer.

#### · Keep the camera installation away from video noise

If cables are wired near electric lighting wires or a TV set, noise may appear in images. In this event, relocate cables or reinstall equipment.

#### · Check the ambient temperature and humidity

Avoid using the camera where the temperature is hotter or colder than the specified operating range. Doing so could affect the internal parts or cause the image quality to deteriorate. Special care is required to use the camera at high temperature and humidity.

#### · Should you notice any trouble

If any trouble occurs while you are using the camera, turn off the power and contact your dealer. If you continue to use the camera when there is something wrong with it, the trouble may much worse and an unpredictable accident may occur.

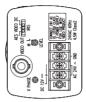
## **11. IN CASE OF PROBLEMS**

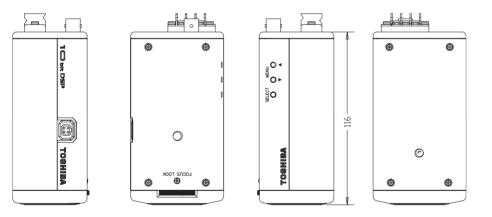
Condition	Check Points	
No image	<ul> <li>Are the camera and connected equipment turned on?</li> <li>Is the iris of the lens adjusted properly?</li> <li>Are cables connected correctly?</li> </ul>	
Unnatural color	<ul><li> Is the monitor TV adjusted correctly?</li><li> Is the lighting too weak?</li></ul>	

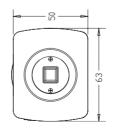
## **12. SPECIFICATIONS**

Power	AC 24V ~ ±10% 60 Hz/DC 12V === ±10%
Power consumption	4.5W (max) with AI lens
Image sensor	1/3 inch CCD image area sensor
Image pickup area	4.96 mm (0.195 inch) horizontal $\times$ 6.0 mm (0.236 inch) vertical (1/3 inch type)
Effective picture element	768 horizontal $\times$ 494 vertical
Scanning system	2:1 interlace NTSC Standard TV system
Scanning frequency	15.75 kHz horizontal 60 Hz vertical
Synchronization	Line-Lock, Internal manually switchable
Resolution	Horizontal 540 TV lines (typ)
Minimum illuminance of subject	0.2 Lux (F1.2, AGC: HIGH, More than 10% of image output $\gamma$ = 0.45)
S/N	50 dB or more (AGC off, weight ON)
Video output	VBS 1.0V p-p / 75 ohms, composite
Output impedance	75Ω unbalanced
White balance	AUTO (2500K to 10,000K) INDOOR, OUTDOOR, MANUAL
Iris control	Video Out / Iris Driver Circuit Built in
Gain control	Average AGC, OFF, STD (24dB), HIGH (30dB)
Backlight compensation	4 modes BLC function for different application
Lens mount	CS mount
Ambient temperature	14°F to + 122°F (-10°C to 50°C)
Ambient humidity	20% to 80%
Weight	0.8 lb (360 g)
External dimensions	2.48 (W) $\times$ 1.97 (H) $\times$ 4.57 (D) inches (63 $\times$ 50 $\times$ 116 mm)
Automatic electronic shutter	ON (1/60s to 1/100000s) / OFF (1/60s)

## **13. EXTERIOR VIEW**







## MEMO

## MEMO

## LIMITED WARRANTY CCD SECURITY CAMERA IK-6550A

The Imaging System Division ("ISD") of Toshiba America Information Systems, Inc. makes the following limited warranties with regard to this CCD Camera Model IK-6550A ("Product"). These limited warranties extend to the Original End-User ("You[r]").

Three (3) Year Limited Warranty of Labor and Parts ISD warrants that this Product will perform in accordance with specifications for a period of three (3) years from the date of purchase by the Original End-User. During this three (3) 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) call (877) 855-1349 to receive a RMA number: and (b) pay all transportation and insurance charges for shipment of the Product to the ASP or Toshiba Exchange Center. ISD reserves the right to substitute factory refurbished parts in place of those in need of repair.

Instruction Manual (Owner's Manual): You should read the Instruction Manual (Owner's Manual) thoroughly before operating this Product. Before seeking warranty service, you should check the troubleshooting guide in the Instruction Manual (Owner'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 to first verify operation or installation assistance. (877) 855-1FIX
- 2. If technical support determines that the unit is defective, an RMA will be issued with return instructions for repair.
- 3. 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.
- 4. Prepay all transportation and insurance costs.

Your Responsibilities: This Limited Warranty is subject to the following conditions:

- 1. You must provide the bill of sale or proof of purchase at the time that warranty service is required.
- You must notify (877) 855 1349 within (30) days after you discover that the product does not perform in accordance with specifications during the Limited Warranty period.
- 3. 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 or Toshiba Exchange Center.

DISCLAIMERS: ALL OTHER EXPRESS OR IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OF REPLACEMENT OF THE PRODUCT. IN NO EVENT WILL ISD OR ITS PARENT COMPANY OR ANY ASP BE LIABLE TO YOU OR ANY THIND PARTY FOR ANY DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT. THIS LIMITATION APPLIES TO DAMAGES OF ANY KIND, INCLUDING ANY DIRECT OR INDIRECT DAMAGES, LOST PROFITS, LOST SAVINGS OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER FOR BREACH OF CONTRACT, TORT OR OTHERWISE, OR WHETHER ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH PRODUCT, EVEN IF TAIS, ITS PARENT COMPANY, OR AN ASP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OF OF ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR SOME PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THIS LIMITED WARRANTY SHALL BE VOID IF THE PRODUCT OR PARTS HAVE BEEN SUBJECTED TO MISUSE, ABUSE, ACCIDENT, IMPROPER INSTALLATION, IMPROPER MAINTENANCE, OR USE IN VIOLATION OF ISD'S WRITTEN INSTRUCTIONS, OR WHERE THE PRODUCT HAS BEEN ALTERED OR MODIFIED WITHOUT ISD'S PRIOR AUTHORIZATION, OR UPON THE REMOVAL OR ALTERATION OF ISD'S FACTORY SERIAL NUMBER. LABOR SERVICE CHARGES FOR PRODUCT INSTALLATION, SET UP AND ADJUSTMENT OF CONTROLS ARE NOT COVERED BY THIS LIMITED WARRANTY

No person, agent, distributor, dealer, authorized service provider, or company is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of ISD arising under this Limited Warranty or under any statute, or law of the United States or any state thereof, is herby limited to one (1) year from the date You discovered or should have discovered the problem. This limitation does not apply to implied warranties arising under state law. Some states do not permit limitation of the time within which You may bring an action beyond the limits provided by state law, so the above provision may not apply to You. This Limited Warranty gives You specific legal rights and You may also have other rights which vary from state to state.

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

Imaging Systems Division

TOSHIBA