

SECTION 1 GENERAL DESCRIPTION

TOSHIBA

INSTRUCTION MANUAL

CCD COLOR CAMERA IK-6200A/IK-6400A

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

14. Object and Liquid Entry

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

15. Servicing

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

16. Damage Requiring service

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

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the video product.
- If the video product has been exposed to rain or water.
- 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.
- If the video product has been dropped or the cabinet has been damaged.
- When the video product exhibits a distinct change in performance-this indicates a need for service.

17. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer with the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

18. 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.

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. Heed Warnings

All warnings on the product and in the instruction manual should be adhered to.

4. Follow Instructions

All operating and use instructions should be followed.

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-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool and the like.

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 child or adult, and 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. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

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

12. Lightning

For added protection for 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.

13. Overloading

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



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



The lightning 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:
WORDED : THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO ALL LOCAL CODES.

Note : The camera is indoor used

INFORMATION
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.

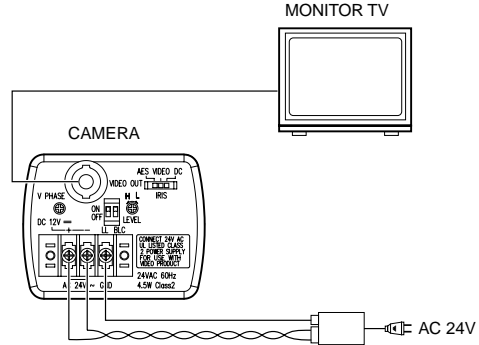
1. COMPONENTS:

- (1) Camera 1
- (2) Accessories
 - (a) Lens Connector 1 (E4-191J-100(M))
 - (b) Instruction Manual 1
 - (c) Lens Cap 1

2. CONNECTION AND OPERATIONS

Notes on connecting

Power plugs of connected equipment must be disconnected before installations.
 A 75-ohm coaxial cable (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.
 Lenses, coaxial cables for video signals and the power cord are not supplied with the camera.



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

Do not overload power supply

Since this camera uses 24V AC UL Listed Class 2 power supply or 12V DC power supply, it should be connected to a power supply that allows for at least 5w consumption.

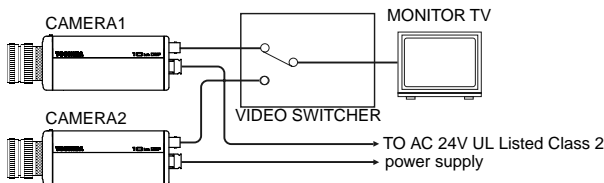
3. Line-Lock control

Matching the vertical synchronization with the power frequency is called the Line-Lock.

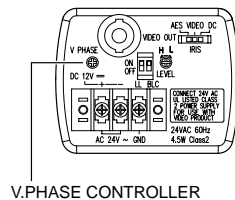
This function is activated when the LL switch is set to ON.



When two or more cameras are switched by 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.



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 line of all cameras so that they all share the same phase. If you still have vertical fluctuation, adjust the V.PHASE controller.



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.

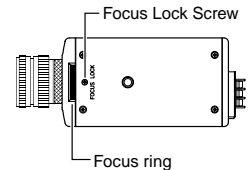
It takes about 10 seconds or more until a stable synchronization is obtained after the power is turned on. This normal, because several seconds are required to stabilize the camera against power noise.

4. LENS

Back-Focus Adjustment

Back-Focus is adjusted at the factory to accommodate most standard lenses. However, at times, slight adjustment to the camera back-focus is necessary.

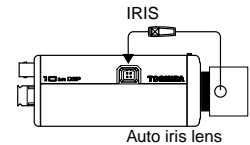
Mount the Lens to the camera first. Then loosen the Focus Lock Screw. Then rotate the Focus ring until a clear image is achieved. Afterwards, tighten the Focus Lock Screw.



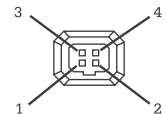
Note

When the lens weight is more than 1 kg (2.2 lbs), support it on the lens side rather than rely on screw that fix the camera to the tripod.

This camera supports two types of auto-iris lens: Video-type 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.



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



5. AUTOMATIC ELECTRONIC SHUTTER (AES)

Exposure time is controlled automatically within a range of 1/60 sec. to 1/100000 sec. to obtain an adequate signal when the back panel switch is turned to AES.

When the back panel switch is turned to VIDEO or DC, the exposure time is fixed 1/60 sec.

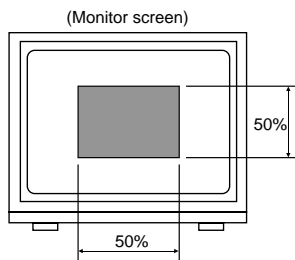
6. BACKLIGHT COMPENSATION (BLC)

This function is activated when the BLC switch is set to on.



When the automatic electronic iris and the auto iris lens is used, the exposure adjustment is automatically performed so that a best picture is obtained at a monitor zone of about 60% in horizontal and about 60% in vertical direction.

This function is effective when a strong light enters the portion other than this zone and auto iris lens closes and darkens the area to view.



8. IN CASE OF PROBLEMS

Condition	Check Point
No image	<ul style="list-style-type: none"> • Are the camera and connected equipment turned on? • Is the iris of the lens adjusted properly? • Are cables connected correctly?
Unnatural color	<ul style="list-style-type: none"> • Is the monitor TV adjusted correctly? • Is the lighting too weak? <p>Note</p> <ul style="list-style-type: none"> • When external light and internal light are mixed or when the object includes some chromatic colors are shot, a hue may partly have a little difference.

7. NOTES ON USE AND INSTALLATION

Do not aim the camera at the sun

Do not aim the camera at the sun or point it at sun even if you are not shooting.

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 not a malfunction.

Treat the camera with care

Do not drop the camera or subject it to strong shock of vibration. Otherwise, the camera may malfunction.

Never touch internal parts

Do not touch the internal parts of the camera other than the parts specified. Otherwise, the camera may malfunction.

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.

Install the camera

Where no video noise appears

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.

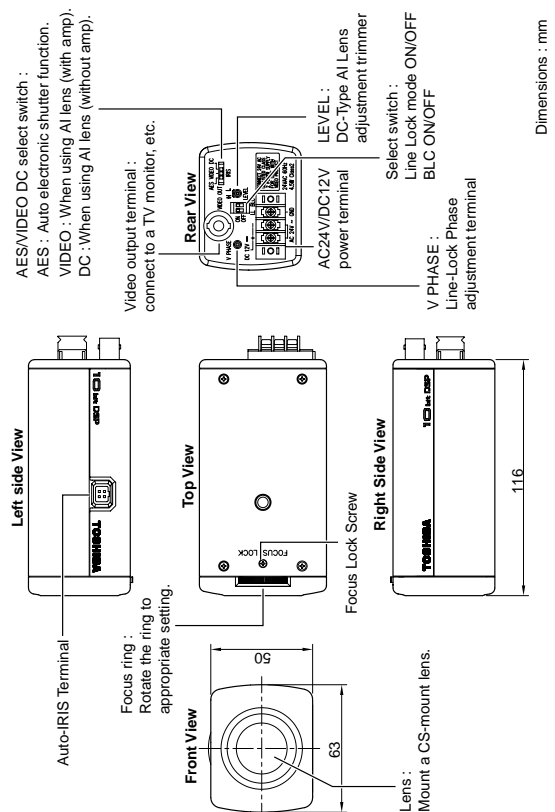
Check the ambient temperature and humidity

Avoid using the camera where the temperature is hotter or colder than specified. Otherwise, the quality of images may deteriorate or internal parts may be affected. Special care is required to use the camera at high temperature and humidity.

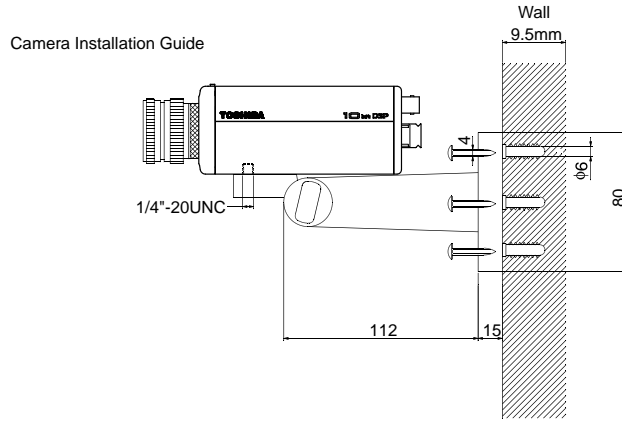
Should you notice any trouble

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.

9. PART NAMES & FUNCTIONS :



10. CAMERA INSTALLATION GUIDE



The Installation Guide is for reference only.
Bracket is not be enclosed.

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