



**For Customer Use:**

Enter below the Serial No. which is located on the body.  
Retain this information for future reference.

Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_

# TK-C750

These instructions are for TK-C750U and TK-C750E.

## IMPORTANT SAFEGUARDS

1. Read all of these instructions.
2. Save these instructions for later use.
3. All warnings on the product and in the operating instructions should be adhered to.
4. Unplug this appliance system from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
6. Do not use this appliance near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
7. Do not place this appliance on an unstable cart, stand, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the appliance. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
8. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the appliance and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the appliance on a bed, sofa, rug, or other similar surface. This appliance should never be placed near or over a radiator or heat register. This appliance should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
9. This appliance 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 supplied to your home, consult your dealer or local power company. For appliance designed to operate from battery power, refer to the operating instructions.
10. This appliance system is equipped with a 3-wire grounding type plug (a plug having a third (grounding) pin). This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding plug.
11. For added protection for this 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 antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
12. Do not allow anything to rest on the power cord. Do not locate this appliance where the cord will be abused by persons walking on it.
13. Follow all warnings and instructions marked on the appliance.
14. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
15. Never push objects of any kind into his appliance through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the appliance.
16. Do not attempt to service this appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
17. Unplug his appliance from the wall outlet and refer servicing to qualified service personnel under following conditions:
  - a. When the power cord or plug is damaged or frayed.
  - b. If liquid has been spilled into the appliance.
  - c. If the appliance has been exposed to rain or water.
  - d. If the appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to normal operation.
  - e. If the appliance has been dropped or the cabinet has been damaged.
  - f. When the appliance exhibits a distinct change in performance - this indicates a need for service.
18. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
19. Upon completion of any service or repairs to this appliance, ask the service technician to perform routine safety checks to determine that the appliance is in safe operating condition.



## COLOR VIDEO CAMERA

## Instructions

Thank you for purchasing the JVC color video camera. To obtain the best results from your new camera, read these instructions carefully before use; retain the manual for future reference.

**WARNING:**  
**TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

### Information for USA

This device complies with Part 15 of the FCC Rules. Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

### INFORMATION (FOR CANADA) RENSEIGNEMENT (POUR LE CANADA)

This Class [B] digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

## PRECAUTIONS

- This unit incorporates the AGC (Auto Gain Control) function, which increases the sensitivity automatically in dark places. It is not a malfunction when the image looks grainy in dark conditions.
- Before mounting the camera, first mount the lens to be used with the camera, and then operate it in order to check the back focus.
- If a high-intensity object (such as a lamp) is in shot, the image on the screen may have vertical lines (smear) or blur (blooming) at its periphery (especially in AES mode). This is a characteristic of the CCD, and is not a defect.
- If an EE lens is used, set the automatic electronic shutter switch (AES) to OFF. If set to ON, flickering may occur. If a manual iris lens is used, set the AES to ON.
- When used in hot places, vertical lines may appear on the screen of this camera. This is a characteristic of the CCD and not a failure of the camera.
- The automatic tracking system may not function properly when shooting with non-standard lighting or lighting with a color temperature which exceeds the capability of the camera.
- If the camera subject is a single solid color (other than white), the auto white circuit will normally attempt to change this color to white. In the case of this camera, if it cannot make a correct prediction, the previous white balance setting will be maintained until the subject colors become more varied.
- This unit assumes that the light source being used is either natural lighting (sunlight) or incandescent lamps (color temperature 2300K-10000K). Under special light sources, such as sodium lamps, colors may appear different compared to what is visible to the eye.
- Noise may appear in the picture and/or the colors may be incorrect if the camera is used near a radio or television transmitting antenna, in places where strong electromagnetic waves are generated by transformers, motors, etc., or near devices emitting radio waves, such as transceivers or cellular phones.
- This unit accepts only a DC iris lens.
- To save energy, be sure to turn off the system when not in use.

## MOUNTING A LENS

1. Before mounting a lens, check whether it is a C-mount or CS-mount lens. If a C-Mount lens is used, loosen the back-focus locking screw (M 2.6) using a Phillips head screwdriver, turn the back-focus adjusting ring with your fingers or the screwdriver and change the mounting method.
2. Dimension (b) of the lens shown in the illustration must be as shown in the table below. If (b) exceeds the value in the table, it may damage the inside of the camera or correct mounting may be impossible; never use such lenses. Do not attach a C-mount lens when using the CS-mount.

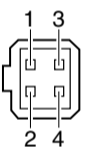
Lens	Flange back (c)	Dimension (b)
C mount lens	17.526mm	10mm or less
CS mount lens	12.5mm	5.5mm or less

The F mark indicates a focal point.

3. Mount the DC IRIS lens on the camera by turning the lens clockwise. Adjust its position.
4. If the lens has an auto-iris mechanism, connect the lens cable after checking the pin assignment.

Pin No.	Lens	DC IRIS (does not contain EE amplifier)
1	Brake ⊖	[Voltage: 0.45 V - 4.05 V] [Current: 26 mA max.]
2	Brake ⊕	
3	Drive ⊕	
4	Drive ⊖	

\*4 pin plug, service part number: SCV2859-001  
For details, please consult your JVC dealer.



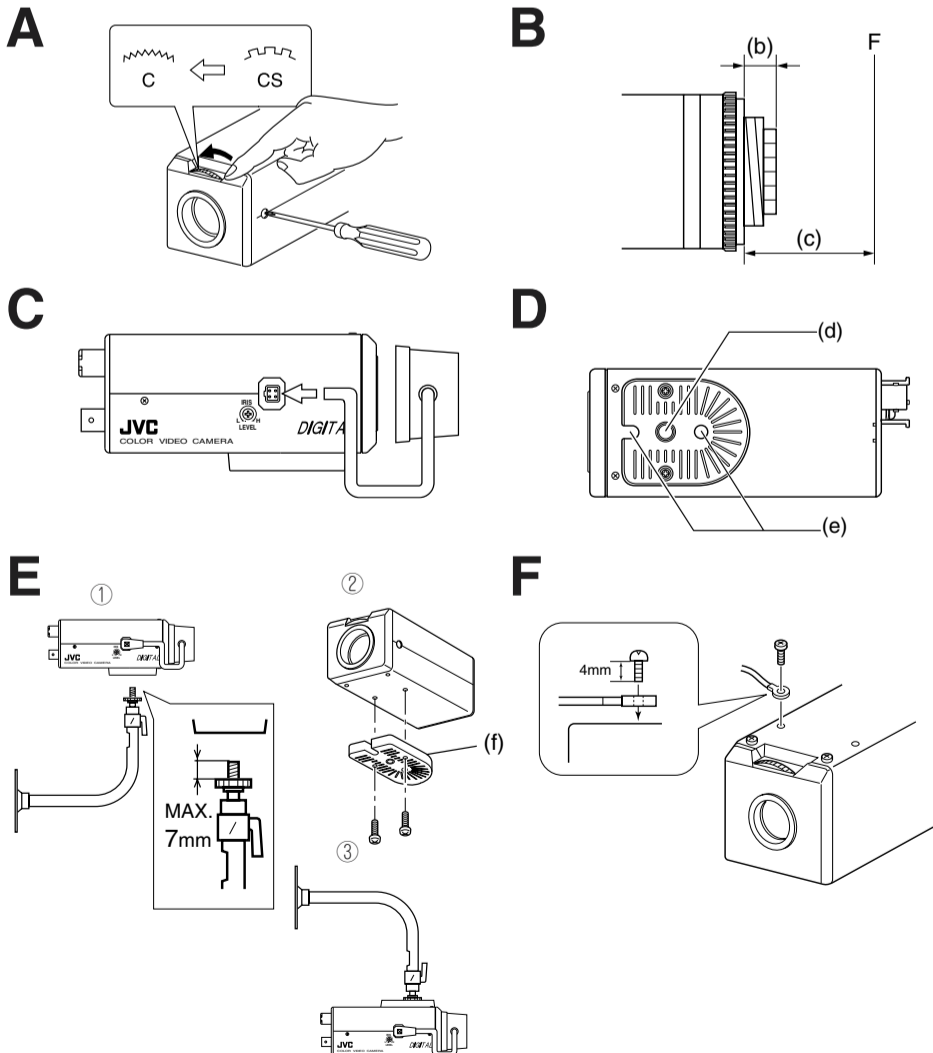
### For USA and CANADA

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

The lightning flash with arrowhead symbol, within an equi-lateral 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.

**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 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.



## CONNECTION

1. When the camera is powered, the POWER LED lights up.
- | CAMERA type | Power                          |
|-------------|--------------------------------|
| TK-C750U    | AC 24V ~ (class 2 only)        |
| TK-C750E    | AC 24V ~ (isolated power only) |

2. Connect to a video monitor, etc. (75 Ω)
3. When mounting the camera on a fixer, pan/tilt, etc., use the camera mounting screw hole (d) located on the camera-mounting bracket. **CAUTION: Use a screw shorter in length than 7mm from the camera-mounting face.** Furthermore, make use of the rotation prevention holes (e) to prevent the camera from falling and be sure to mount the camera securely. Special precautions must be taken when mounting the camera on a wall or a ceiling. JVC is not liable for any damage caused by incorrect installation.

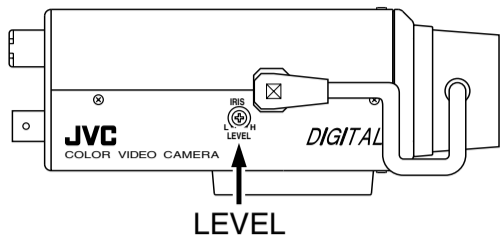
4. Installation of camera
  - With the mounting plate on the underside  
This camera is originally designed to be mounted from underneath, as shown ①. The hole is standard photographic pan-head screw size (1/4-20 UNC, as is found in a typical camera fixing point or pan & tilt head.
  - With the mounting plate relocated to the topside  
Remove the CAMERA MOUNTING BRACKET (f) from the underside of the camera by removing the two fixing screws as shown ②. Attach the CAMERA MOUNTING BRACKET (f) to the top, then mount the camera on the Fixing Unit as shown ③. Make sure that two original screws are used when mounting the CAMERA MOUNTING BRACKET (f). Be sure to use a 6 mm long locking screw for the camera-mounting bracket. These instructions assume the camera will only be mounted indoors.

### Fall Prevention

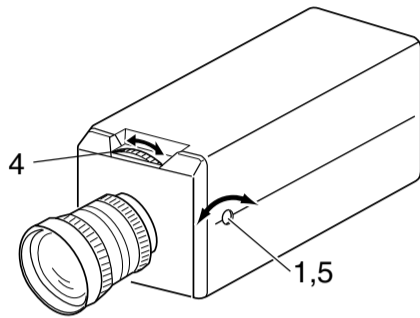
- Exercise maximum caution when installing the unit to a wall or ceiling. If in any doubt ask a professional to do the job, because if the unit were subsequently to fall, it could result in personal injuries or accidents.
- When installing the unit on a fixer, turn table, etc., be sure to install it firmly and to use one of the rotation-preventing holes (e) provided.
- As a failsafe against falling, attach the unit by chain, wire cable or other safety restraint to an appropriate anchor point. Attach the fall prevention wire using the black screw on the upper surface of the camera as shown in figure F. When changing the side at which CAMERA MOUNTING BRACKET is installed, be sure to change the attachment side of the fall prevention wire also to the appropriate side.
- Specified screw (M2.6 x 4 mm)  
Never use any screw longer than the specified length as the inside can be damaged.



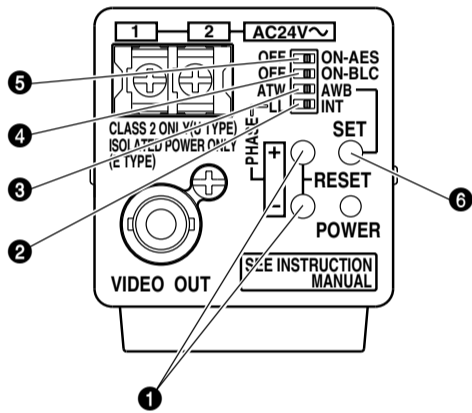
G



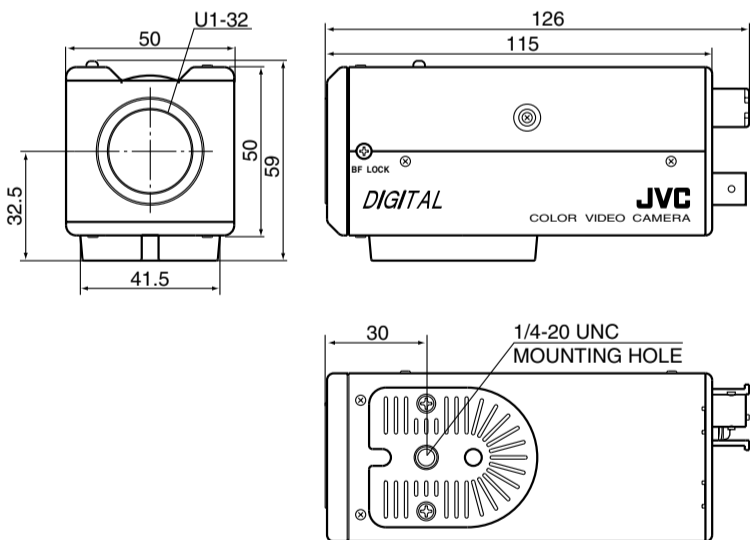
H



I



J [ : mm]



## LENS ADJUSTMENT

→ G

### Video adjust

Configure the camera according to the Connection instructions above, turn it on, display an image on the monitor, and check the image. The camera has been factory-set for optimum operation, but it may need further adjustment according to the prevailing conditions and to the lenses to be used. If the image does not appear natural, adjust as follows:

#### • LEVEL adjustment

Monitor screen	Direction of Rotation of LEVEL control
Too bright	Anti-clockwise, towards L (Low)
Too dark	Clockwise, towards H (High)

- If the sensitivity adjustment LEVEL is turned too far to L, the sensitivity will increase due to the AGC function of the camera, making the image look grainy.
- In order to adjust the Iris LEVEL of this camera, first, set it to H (iris fully open) and then adjust the LEVEL slowly to its optimum position.

### Back focus adjustment

→ H

Back focus has been optimally adjusted at the factory for CS-mount lenses, but it may need re-adjustment if the mount is changed for C-mount lenses. If required, adjust as follows:

#### • With a fixed-focus lens

If the focus can not be adjusted correctly by rotating the lens focus ring, adjust the back focus as follows.

1. Loosen the back focus locking screw by turning it anti-clockwise (↺) with a screwdriver.
2. Point the camera at a test pattern.
3. Turn the lens focus ring to ∞.
4. Turn the back focus adjustment ring to find optimum focus.
5. Tighten the back focus locking screw by turning it clockwise (↻).

#### • With a zoom lens

If the lens does not track (loses focus) at any point in the zoom range, adjust as follows:

1. Loosen the back focus locking screw by turning it anti-clockwise (↺) with a screwdriver.
2. Point the camera at a comparatively dark scene with thin lines.
3. Set the lens to the maximum telephoto position, and adjust the lens focus.
4. Set the lens to the maximum wide-angle position, and turn the back focus ring to adjust the focus.  
(Repeat steps 2 and 3 two or three times.)
5. Tighten the back focus locking screw by turning it clockwise (↻).

## SETTING SWITCH (The illustration shows the factory-set default settings.)

→ I

### Line Lock

To set the camera in LL mode for synchronization with the power supply frequency, do the following:

1. Turn switch 2 to "LL";
2. Press the + or - button 1 to make the phase variable.

Adjust with the button 1 so that the vertical phase of the camera matches the vertical phase of another camera (or system) with a multi-channel oscilloscope. To reset the setting, press the + and - buttons 1 simultaneously.

U type: 60Hz power region only  
E type: 50Hz power region only

### White Balance

White balance can be adjusted within the scope of 2300K to 10000K color temperature. When switch 3 is at ATW (Auto-Tracking White Balance), the white balance is automatically adjusted according to the color temperature of the ambient illumination.

When the white balance is set to AWB (Auto White Balance), press and hold the SET button 6 for 2 seconds to adjust or readjust the white balance. Once the white balance is adjusted, the setting will not track changes in the color temperature of the ambient illumination.

### BLC (Back Light Compensation)

The switch 4 helps to rectify the situation where a subject appears dark because of backlighting. Set this switch to ON for strongly backlit subjects.

### AES (Automatic Electronic Shutter)

Turning this switch 5 "ON" when a lens with a manual iris diaphragm is used enables the automatic adjustment of image brightness. In this case the shutter speed changes according to the brightness of the subject.

Hunting may occur at a certain object brightness due to the mechanism of the AES circuit, but this is not a fault.

## SPECIFICATIONS

<b>Image pickup device</b>	: 1/3-inch interline-transfer CCD U type : 510 (H) × 492 (V) E type : 500 (H) × 582 (V)
<b>Synchronization method</b>	: Internal Line lock (U type: 60 Hz, E type: 50 Hz, regions only)
<b>Scanning frequency</b>	: U type : (H) 15.734 kHz, (V) 59.94 Hz E type : (H) 15.625 kHz, (V) 50 Hz
<b>Resolution</b>	: 330 TV line (H) Typ.
<b>VIDEO OUT</b>	: Composite video signal 1 V(p-p), 75 Ω, unbalanced
<b>Video S/N ratio</b>	: 50 dB
<b>Minimum required illumination</b>	: 0.28 lx typ (F1.2, 25%), 0.55 lx typ (F1.2, 50%)
<b>Lens mount</b>	: C/CS mount
<b>Power supply</b>	: U type : AC 24 V ~ 60 Hz, 3.3W E type : AC 24 V ~ 50 Hz/60 Hz, 240 mA

### and power consumption

**Ambient temperature** : -10°C to 50°C (operation)  
0°C to 40°C (recommended)

### Mass

: 340 g

**Provided accessory** : WARRANTY CARD (U type only) ... ×1

### DIMENSIONS (Unit: mm)

(Design and specifications are subject to change without notice.)

→ J

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