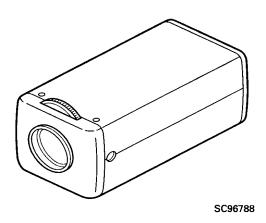
JVC

COLOR VIDEO CAMERA

TK-C1360

INSTRUCTIONS





CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



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 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.

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.

Due to design modification, data given in this instruction book are subject to possible change without prior notice.

WARNING:

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

AVERTISSEMENT:

POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER L'APPAREIL A L'HUMIDITE OU A LA PLUIE.

INFORMATION (FOR CANADA) RENSEIGNEMENT(POUR CANADA)

This Class [B] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numénque de la class [B] respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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Features

- High-quality picture provided by the 1/2-inch, 410,000-pixel (380,000 effective pixel) for NTSC, 470,000-pixel (440,000 effective pixel) for PAL high-performance CCD with 470 TV line horizontal resolution and 0.95 lx (25%, F1.2) minimum object illumination.
- Backlight compensation (BLC) detecting areas can be selected from 4 fixed patterns as well as from two user-selectable patterns.
- Highlight inverter (HLI) function makes the picture around the position of a highlight easier to see.
- Lens mount switching mechanism makes it possible to use either a C-mount lens or CS-mount lens.
- Menu set-up system eliminates the need to set operations using switches and controls.
- The Electronic sensitivity enhancement function (auto/manual)
 provides an appropriate exposure even under low-intensity illustrations.

- Always make a prior test recording to help optimise the final recording.
- JVC does not assume any responsibility for recording failures caused by the video camera, VCR or tape cassette.

mination.

Equipped with a communication terminal for camera setup.

Precautions

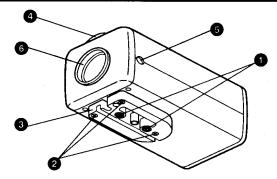
- · Avoid installing the unit in the following locations.
 - Places exposed to rain or moisture

may appear on the CCD, but this is not a malfunction.

Lens aperture will be open when the electronic shutter is operated on AUTO (except EAST 1/60 (All) 1/50 (Pl) mode with an

2

Controls, connectors and indicators



1 Camera mounting holes (1/4-inch)

Use one of these threaded holes when mounting the camera on a mount or turret. Two threaded holes are provided on the front and rear and can be selected according to the installation requirements.

2 Camera mounting bracket locking screws (x3: M2.6x5mm) Do not use any screw longer than 5 mm.

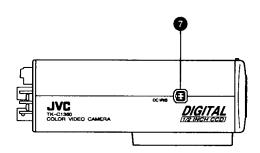
3 Camera mounting bracket

The bracket has been attached on the bottom of the camera before shipment. It can also be attached on the top according to the installation requirements.

To re-attach the bracket use the threaded holes at the top, with the 3 camera mounting bracket locking screws 2.

Backfocus adjustment ring

This ring both allows the adjustment of the backfocus, accommodating both C and CS lenses.



Loosen the BF LOCK screw ⑤ by turning it counterclockwise before turning this ring, and be sure to secure screw ⑤ by turning it clockwise after turning this ring. The TK-C1360 has been adjusted to the optimum position for the C mount before shipment.

[5] [BF LOCK] Backfocus locking screw This screw locks the backfocus adjustment mechanism.

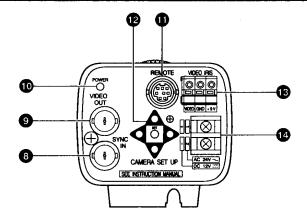
6 Lens mount

The lens mount is compatible with C-mount lenses (1/2 and 2/3 inch) and CS-mount lenses (1/2 inch).

[DC IRIS] DC iris connector Connect to an auto-iris lens which does not incorporate an EE amplifier. (See "Lens" on page 16.)

4

Controls, connectors and indicators (continued)



8 [SYNC IN] Sync signal input connector

This BNC connector accepts the input of an external sync signal such as a composite video (VBS) or black burst (BB) signal. When a sync signal is input into this connector, the camera operation is automatically synchronized with the external sync signal.

The 75-ohm termination of this connector can be switched on/ off on the menu screen as required. (For details, see "TERM. [75-ohm termination setting]" on page 7.)

9 [VIDEO OUT] Video signal output connector

This BNC connector outputs a composite video signal. Connect this to the video input connector of a video monitor, switcher, etc.

10 [POWER] Power indicator lamp

This lights when power is supplied to the camera.

[REMOTE] Communication connector

Exclusive connector for use in communication.

(2 CAMERA SET UP) Camera set-up screen operation buttons
These buttons are used in the set-up operations.

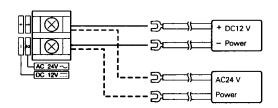
For details, see "Setup functions" from page 6.

[VIDEO IRIS] Video iris connector

Connect to an auto-iris lens incorporating an EE amplifier. (See "Lens" on page 16.)

[DC12V/AC24V] Power input connector

Connect a DC 12 V \pm 10% or AC 24 V \pm 10%, 50/60 Hz power supply.



Setup functions

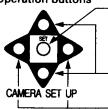
■ CAMERA SETUP screen

The camera is adjusted using the CAMERA SETUP screen. Press the SET button to display the CAMERA SETUP screen on the monitor

CAMERA SETUP screen



Operation buttons



Press to display the SET UP screen (current adjustment condition).

To clear the function, move the cursor > to "END" and press here. The SET UP screen returns to the normal screen.

Press to move the cursor > or select an adjustment option.

Press to select the mode of the adjusted item or set its level.

SYNC ADJUST menu

For settings related to the sync signals.

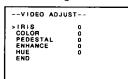


- 1. Move the cursor to "SYNC ADJUST".
- 2. Press the SET button to display the SYNC ADJUST menu.

(See pages 7 and 8 for the operating procedure.)

VIDEO ADJUST menu

For settings related to the video signal.

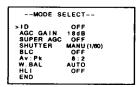


- 1. Move the cursor to "VIDEO ADJUST".
- 2. Press the SET button to display the VIDEO ADJUST menu.

(See pages 8 and 9 for the operating procedure.)

MODE SELECT menu

For settings related to the camera functions.



- 1. Move the cursor to "MODE SELECT".
- 2. Press the SET button to display the MODE SELECT menu. (See pages 9 to 14 for the operating pro-

cedure.)

COMMUNICATION menu

Set this menu when using the REMOTE connector.



6

Setup functions (continued)

SYNC ADJUST menu

TERM. [75-ohm termination setting]

SYNC ADJ	UST
>TERM. H PHASE SC COARSE SC FINE LINE LOCK V COARSE	ON 25 1 128 OFF
V FINE END	128

Set according to whether the signal input into the sync signal input terminal (8) to be terminated with 75 ohms or not. ON: Terminated with 75 ohms

OFF: Open (Initial set : ON.)

Note:

The terminal is open when the power is OFF.

H PHASE [Horizontal phase adjustment]

SYNC ADJ	UST
TERM.	ON
>H PHASE	25
SC COARSE	1
SC FINE	128
LINE LOCK	OFF
V COARSE	1
V FINE	128
END	
I	

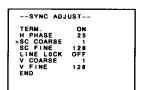
Adjustment of the H phase in gen-lock operation. Adjust with reference to another camera (or system).

: 25.)

Variable range : 0 to 50.

(Initial set

SC COARSE [Sub-carrier phase coarse adjustment]



Coarse adjustment of the SC phase in genlock operation. The SC phase can be varied by up to 90° in each direction.

Adjust with reference to another camera (or system) and together with the SC FINE adjustment.

Variable range : 1, 2, 3, 4.

(Initial set : 1.)

SC FINE [Sub-carrier phase fine adjustment]

SYNC AD.	JUST
TERM. H PHASE SC COARSE SSC FINE LINE LOCK V COARSE V FINE END	ON 25 1 128 OFF 1

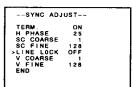
Fine adjustment of the SC phase in genlock operation.

Variation range: 0 to 255. (Initial set : 128.)

Notes:

Adjust SC COARSE and SC FINE only after adjusting H PHASE.

■ LINE LOCK [Line lock setting]



Set when the vertical sync signal of the camera is to be locked with the AC power frequency.

ON: LL mode is activated. OFF: LL mode is un activated.

Set to OFF when using INT (internal sync) or EXT (external sync).

(Initial set : OFF.)

Notes: -

- · Do not apply an external sync signal in the LL mode.
- The display will be switched over between ON and OFF, however, the LL function is only available with the power frequency of 60 Hz.

7

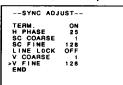
V COARSE [Vertical phase coarse adjustment]

--SYNC ADJUST --TERM.
H PHASE
SC COARSE
SC FINE
LINE LOCK
V COARSE
V FINE
END 128 OFF

Adjustment to align the vertical phase with another camera operating in the line lock (LL) mode. The phase can be varied by up to 180° in courses 1 and 2. Adjust together with the V FINE adjustment.

Variable range : 1. 2. (Initial set : 1.)

V FINE [Vertical phase fine adjustment]

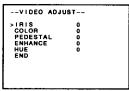


Fine adjustment of the vertical phase in the LL mode.

Variable range : 0 to 255. (Initial set : 128.)

VIDEO ADJUST menu

IRIS [Iris level]



Adjustment of the luminance level of the video signal.

Variable range : - 5 to 5. : 0.) (Initial set

· Raise the brightness level

......Increase the number (>)

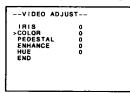
Lower the brightness level

...... Decrease the number ()

- Note: -

When using a video-iris lens or DC-iris lens or when SHUTTER is set to AUTO, set the AGC GAIN of MODE SELECT menu to 0dB before starting iris level adjustment.

■ COLOR [Color level]



Adjustment of the color level of the video signal.

Variable range : - 5 to 5. (Initial set : 0.)

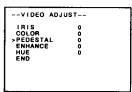
· To increase color saturation

...... Increase the number ().

· To decrease color saturation

...... Decrease the number ().

■ PEDESTAL [Pedestal level]



Adjustment of the pedestal level of the video signal.

Variable range : - 5 to 5. (Initial set : 0.1

To brighten picture

..... Increase the number

To darken picture

...... Decrease the number (<).

■ ENHANCE [Enhancement level]



Adjustment of the aperture control level of the video signal.

Variable range : - 5 to 5. (Initial set : 0.)

 To sharpen the picture tone (by enhancing the aperture control and contour level) Increase the number (\mathbf{D}) .

 To soften the picture tone (by attenuating the aperture control and contour level) Decrease the number (<).

8

(D).

Setup functions (continued)

■ HUE [Hue adjust]



--MODE SELECT--

>ID OFF
AGC GAIN 18dB
SUPER AGC OFF
SHUTTER MANU(
BLC OFF
Av:Pk 8:2
W.88A AUTO
HLI OFF

MODE SELECT menu

MANU (1/80) OFF

ID [Camera ID name/number]

For adjustment of the hue of the video signal. Variable range: - 5 to 5. (Initial set: 0.)

•To make yellowish

To make reddish

....... Decrease the number (<).

Setting method

1. Select "EDIT" with the

or

button and press the SET button. The CAMERA ID screen appears, with the character cursor and the first character in the input section blinking.

The cursor ">" of MODE SELECT menu cannot be moved when ID is set at EDIT.

Select a character with the < or > button.

(Enter a space in positions where no character is to be input.)

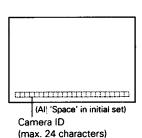
3. Press the \(\nabla \) button to set the character. Then the input section for the next character starts to blink.

(Press the \(\subseteq \) button to return to the previous character.)

4. After all characters have been input by repeating steps 2 and 3, press the SET button. The MODE SELECT screen is displayed again.

5. ID appears when set to ON.

Monitor screen when "ON" is selected (initial setup)



Monitor screen when "EDIT" is selected

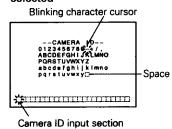
The camera ID can be up to 24 characters.

ON: The camera ID is displayed.

EDIT: The camera ID can be set.

(Initial set : OFF)

OFF: The camera ID is not displayed.



■ AGC GAIN [Automatic Gain Control]



Setting the max. gain of the AGC (Automatic Gain Control).

Variable range: 0, 9 and 18 dB. (Initial set : 18 dB.)

■ SUPER AGC [High-sensitivity automatic gain control]

--MODE SELECT--ID OFF
AGC GAIN 18dB
SSUPER AGC OFF
SHUTTER MANU (180)
BLC OFF
Av:Pk 8:2
W.BAL AUTO
HLI OFF

Use this function if the picture is not bright enough when AGC GAIN is set to 18 dB.

ON: The gain is further increased. OFF: The gain is not increased.

(Initial set : OFF.)

Notes:

- When AGC GAIN is set to 9 or 18 dB or when SUPER AGC is set to ON, dark parts of the picture may look noisy. This is because sensitivity has increased and it is not a malfunction.
- With SUPER AGC set to ON, the level reaches 18 dB even with AGC GAIN at 0 or 9 dB. At this time, the AGC GAIN indication remains at 0 dB or 9 dB.
- The camera ID level can be adjusted by turning SUPER AGC on and off.
- The response of the SUPER AGC may be retarded against acute level changes.

■ SHUTTER [Electronic shutter]

--MODE SELECT-
ID OFF
AGC GAIN 18dB
SUPER AGC OFF
>SHUTTER MANU(1/80)
BLC OFF
AV:Pk 8:2
W BAL AUTO
HI OFF

Set according to whether the electronic shutter is to be switched manually or automatically.

• MANU Options () for PAL To be switched manually.32/60 (32/50), 16/60 (16/50), 8/60 (8/50), 4/60 (4/50), 2/60 (2/50), 1/60 (1/50), 1/100

(1/120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000

• AUTO

 Slow or fast shutter mode is selected automatically.

Initial set : MANU 1/60 (N), 1/50 (P)

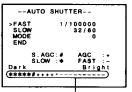
<Setting procedure>

MANUAL

 Press SET button in MANU mode, and () are removed to allow setting.

- 2. Change the shutter speed with *⟨* or *⟨* button.
- Press SET button again, and () comes out to finish shutter speed setting.

AUTO



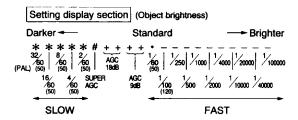
The AUTO SHUTTER menu is used to set the ranges of the automatic operations according to the object brightness of FAST (fast shutter speed), SLOW (slow shutter speed), AGC (Automatic Gain Control) and SUPER AGC (Super-sensitivity Automatic Gain Control).

Setting display section

<Setting procedure>

 When SHUTTER in the MODE SELECT menu is set to AUTO, Press the SET button, the AUTO SHUTTER menu appears on the screen.

The symbols appearing in the setting display section correspond to the setting values for each item as shown below.



- Move the cursor to the item to be changed (FAST, SLOW or MODE).

10

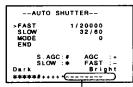
Setup functions (continued)

4. After completing the setting, move the cursor to END and press the SET button; the MODE SELECT menu appears again.

FAST: Sets the upper limit of the fast shutter speed.

Options: 1/60 (50), 1/100 (120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000, 1/40000, 1/100000 () for PAL

(Example) When the upper limit is set to 1/20000



FAST: 1/20000

Fast shutter setup indication: -----

Slow shutter setup indication

) for PAL

Options: 2/60 (50), 4/60 (50), 8/60 (50), 16/60 (50), 32/60 (50)

SLOW: Sets the lower limit of the slow shutter speed.

When the object becomes darker, the shutter speed is automatically changed from the standard 1/60 (50) to progressively to 8/60 (50).

In this case, as the lower limit of the slow shutter speed is set at 8/60, the shutter speed will not be lower than 8/60 even if the object becomes more dark.

- Notes:

When the shutter speed is decreased, the sensitivity can be improved but the motion becomes unsteady.

MODE: Sets the order in which the AGC, SUPER AGC and SLOW shutter speed decrease function when the object brightness becomes low.

Fast shutter set up indication

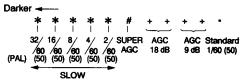
When the object becomes brighter, the shutter speed is automatically changed from the standard 1/60 (50) progressively to 1/20000. In this case, as the upper limit of the fast shutter speed is set at 1/20000, the shutter speed will not exceed 1/20000 even if the object becomes more bright.

- Notes:

When the shutter speed increases, the smear which is an acceptable phenomenon of CCD'S will be accentuated.

(Example) MODE 0

Setting display section (when SLOW: 32/60 (50))

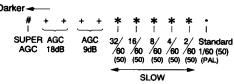


As the object brightness decreases, the auto shutter settings change automatically from the standard 1/60 to AGC (9 dB), AGC (18 dB), SUPER AGC, 2/60 (50), 4/60 (50), 8/60 (50), 16/60 (50) and up to 32/60 (50).

Since the AGC is activated before the LOW shutter speeds when the object brightness decreases, this mode is effective for recording objects in fast motion. However, when the AGC is activated, the picture becomes coarse and the S/N deteriorates.

(Example) MODE 3

Setting display section [when SLOW: 32/60 (50)]

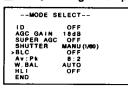


As the object brightness decreases, the auto shutter settings change automatically from the standard 1/60 (50) to 2/60 (50), 4/60 (50), 8/60 (50), 16/60 (50), 32/60 (50), AGC (9 dB), AGC (18 dB) and up to SUPER AGC.

Since the LOW shutter speeds are activated before the AGC when the object brightness decreases, this mode is effective for recording, giving the S/N priority over the motion. If the AUTO mode or a high-speed shutter mode is selected under fluorescent lighting, the picture could flickering or the white balance could be un-stable.

In such a case, the flickering and white balance variation can be improved by setting the shutter speed to 1/100 (1/120) in area where the local power supply frequency is 50 (60)Hz or to 1/60 (50) in an area where it is 60Hz.

■ BLC [Back light compensation]



Set this function when there is a strong light source in the back area.

Four types of fixed area (AREAS 1 to 4) and two types of user-defined area (EDIT 1, 2). Variation range: OFF, AREA1, AREA2, AREA3, AREA4. EDIT1. EDIT2.

Initial set : OFF.

In the following cases, the main unit functions will start.

- 1) When a video iris lens or DC iris lens is used;
- 2) When a SHUTTER is set to AUTO;
- 3) When the AGC is set to 9 dB or to 18 dB;

<Setting procedure>

- 1. Select AREA with 🔾 🖒 buttons.
- Press the SET button to display the detecting area.
 When the EDIT 1 or 2 is selected, set the detecting area as required. (Refer to the next page.)
- When setting is done, press the SET button again and MODE SE-LECT screen will resume.
- Fixed area





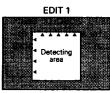


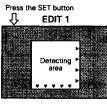


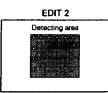
12

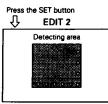
Setup functions (continued)

User set area







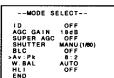


EDIT1

Use this area when the metered area is located at the center of the field of view.

- \(\) button Move the detecting area to the left.
- \(\Delta \) button Move the detecting area upwards.
- D button Move the detecting area to the right.
- button Move the detecting area downwards.

Av:Pk [Average value: Peak value]



Sets the ratio between the average value (Av) and peak value (Pk) in exposure detection.

In the following cases, the main unit functions will start.

- 1) When a video iris lens or DC iris lens is used:
- 2) When a SHUTTER is set to AUTO;
- 3) When the AGC is set to 9 dB or to 18 dB; Variation range : 5:5, 6:4, 7:3, 8:2, 9:1, 10:0.

(Initial set : 8:2.)

Av value effect: Increase the Av value when part other than the high light part are dark and look washed out. This setting is used when there is artificial lighting in a

dark room. (Example: 10:0)

Pk value effect: Increase the Pk value when halation tends to be observed in the highlight part of the picture. (Ex-

ample: 5:5)

EDIT2

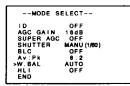
Use this area when the metered area is located at the edge of the screen.

- d button ... Move the un-detecting area to the left.
- \(\Delta \) button ... Move the un-detecting area upwards.
- button ... Move the un-detecting area to the right.
- ∇ button ... Move the un-detecting area downwards.

– Note: -

The detecting areas displayed with AREA1 to 4 and EDIT1 and 2 are for reference and may be different from the actual detecting areas.

■ W.BAL [White balance]



Automatic or manual setting of the white balance in the color temperature range of 2500K to 7000K.

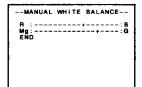
AUTO : Automatic color tem-

perature tracking mode.

MANUAL : Manual adjustment mode.

(Initial set : AUTO.)

MANUAL adjustment screen



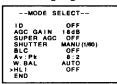
- Adjustment screen appears when pressing the SET button on the "MANUAL" mode.
- 2. Adjust with \triangleleft or \triangleright button.
 - d button is used for adjustment to red (magenta, whereupon + is moved to R (Mg).
 - button is used for adjustment to blue (green), whereupon + is moved to B (G).
- Switching between R/B and Mg/G can be performed with or button.

Note:

In AUTO mode, the optimum white balance may not be obtained when the light source has a color temperature outside the adjustment range.

In such a case, set W.BAL to the MANUAL mode.

HLI [Highlight inverter]



The HLI function inverts the highlight part of the picture so that the parts around it can be seen more clearly. Variable values: OFF, ON(1), ON(2),

(Initial set : OFF)

ON is adjustable in three degrees. The smaller the number in (), the broader the highlighted area to be effected.

ON(3)

<How to set HLI>

- Press
 or
 button, and OFF is changed to ON (2)to enter the HLI mode.
- Press SET button to remove (), and ON2 is displayed to allow on-screen selection.
- 4. Press SET button again, and () comes out to complete setting.

■ To clear the setup functions



- 1. Move the cursor ">" to END.
- Select END mode with

 or

 button.

 MEMORY: Set value holds.
 - CLEAR : All setting values are initial-
- Press SET button to set the END mode, resuming the initial setting screen.

- Notes: ·

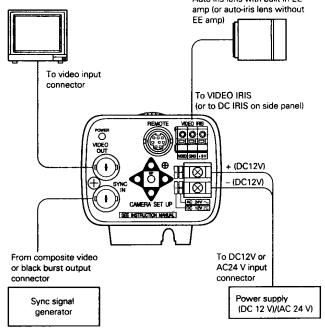
Even if the ID (camera title), PARITY, STOP BIT is cleared, the factory set value will not be resumed.

14

Connection

- System connection example
- Do not turn on the power of any component before all connections have been completed.
- Read the instruction manuals of the components to be connected carefully.

 Auto-iris lens with built-in EE



Genlock connection

When the external sync signal is a composite video or black burst signal with some systems, genlocking by applying an external sync input requires the horizontal phase (H PHASE) and/ or color phase (SC COARSE) to be adjusted.

Notes:

- Genlocking is not possible with a signal containing too much jitter, such as a VCR or videodisc playback signal.
- For details, consult a JVC authorized dealer.

- Caution -

- Be sure to observe the correct +, polarity when connecting a DC 12 V power input.
- The DC 12 V power should have a ripple voltage of no more than 50 mV.
- Never connect the DC 12 V and AC 24 V power inputs simultaneously.
- Be sure to attach the provided ferrite core to the lens cable or power cable to be connected to this camera. (see page 18 for details)

Communication connector pin layout [REMOTE] (Camera connector viewed from the outside)



Pin No.	Signal name	Pin No.	Signal name
1	RXH	5	NC
2	TXH	6	RXC
3	NC	7	TXC
4	NC	8	NC

Communication cable provided

Communication dable provided									
Pin No.	1	2	3	4	5	6	7	8	Cover
Lead color	Red	White	Black	Yellow	Blue	Green	Brown	Gray	Shield

■ Lens mounting procedure

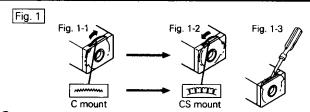
1. Check the mounting of your lens before attaching it to the camera. The camera has been set for a C mount before shipment (Figure 1-1). When mounting a CS-mount lens, loosen the BF LOCK screw (on page 4) by turning it counter-clockwise and turn the backfocus adjustment ring (on page 4) in the direction of the arrow in Figure 1-1 to switch the mounting method. (Figure 1-2 shows the camera set for a CS mount lens.)

Caution

- The ring cannot be turned by more than a certain amount with your finger. Use a thin object (screwdriver tip, etc.) to turn the ring (Figure 1-3).
- Distance L of the lens mounting section shown in the following illustration should comply with the condition shown in the following table. Never use a lens with a flange back distance L greater than, the one specified in the chart below, a this will damage the inside of the camera or may make normal mounting impossible. Also, be careful not to attempt to mount a C-mount lens while the camera is set for a CS mount.



Optim	ng		
point	Lens	Flange back	Distance L
	C-mount lens	17.526 mm	No more than 10 mm
	CS-mount lens	12.5 mm	No more than 5.5 mm



- Mount the lens on the camera by turning the lens clockwise and adjust its position.
- When an auto-iris lens is used, also connect the lens cable to the camera.
 - A If the lens does not incorporate an EE amp, connect the cable to the DC IRIS connector on the side panel (Figure 2-1).
 - B If the lens incorporates an EE amp, connect the cable to the VIDEO IRIS connector on the rear panel (Max 50mA).

Fig. 2

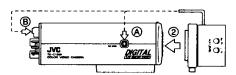


Fig. 2-1

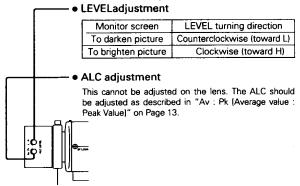
16

Lens (continued)

 After completing connections as shown in "Connection" on page 14, supply power to the camera, display a picture on the monitor and check the image.

Auto-iris lenses have generally been adjusted for the widest range of application before shipment, but readjustment may sometimes be necessary depending on the conditions of the objects to be shot and the lens combination. If the picture recorded using such a lens looks unnatural, readjust as shown below

· Auto-iris lens with built-in EE amp



Auto-iris lens with built-in EE amp

Caution

Do not turn the LEVEL control too far towards "L" as this could cause the AGC of the camera to increase the gain, making the picture look rough.

 Auto-iris lens without EE amp Re-adjust as described in "IRIS [Iris level]" on page 8.

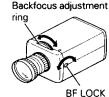
■ Backfocus adjustment

The backfocus has been adjusted before shipment so that the widest range can be obtained with C-mount lenses, but readjustment is necessary when the lens mount is switched to the CS mount or as a combination lens is used. When necessary, readjust the backfocus by the following procedure.

<When a fixed - focus lens is used>

Readjust the backfocus when the optimum focusing cannot be obtained by adjusting the focusing ring of the lens.

- 1. Loosen the BF LOCK screw by turning it counterclockwise with a screwdriver.
- Optimize the focus by turning the backfocus adjustment ring.
- Lock the BF LOCK screw by turning it clockwise.



BF LOCK (backfocus look) ring

<When a zoom lens is used>

Readjust the backfocus when focusing is lost during zooming (from wide angle to telephoto).

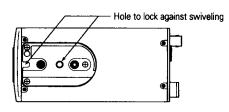
- 1. Loosen the BF LOCK screw by turning it counterclockwise with a screw-
- **2.** Shoot a fine pattern of as dark as possible an object at a distance of more than 3 meters.
- 3. Set the zoom for telephoto and adjust the focus with the lens's focusing
- **4.** Set the zoom for wide angle and adjust the focus by turning the backfocus adjustment ring. (Refer to "When a fixed-focus lens is used" above.)
 - Repeat steps 3 and 4 a few times.
- **5.** Lock the BF LOCK screw by turning it clockwise.

■ Fixing the lens cable

If the lens cable is too long and gets in the way, wrap the cable round the camera mounting bracket as shown below.

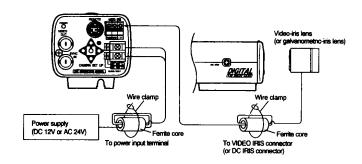
How to thread the iris cable (Example) Routing · Pass straight through

> How to mount the camera on a tripod stand, fixing unit or pan / tilt unit.



- Special precautions must be taken for mounting the camera on a wall or a ceiling. Consult with an installation professional without attempting at installation all by yourself.
- · We are by no means liable for any damage caused by improper installation.

To retain electromagnetic compatibility, use the provided ferrite cores when connecting to the lens or the power source.



Notes:

For lens connection

Install the ferrite cores within 50 mm of the camera-side connectors. (Fasten the ferrite core with the wire clamp provided.)

> : Pass the lens cable through the ferrite core twice and connect it to the

camera.

For power supply connection : Pass the power cable through the

ferrite core three times and connect

it to the camera.

18

Specifications

Image pickup device Effective pixels (NTSC)

(PAL)

: 1/2-inch, interline-transfer CCD : 380,000 pixels [768 (H) x 494 (V)]

440,000 pixels [752 (H) x 582 (V)] : Internal, external, Power sync

Sync systems Scanning frequency (NTSC): 15.734 kHz (H), 59.94 Hz (V) 15.625 kHz (H), 50 Hz (V)

(PAL) Horizontal resolution

: 470 TV lines (H) : 48 dB

Minimum illumination

: 0.95 lx (25%, F1.2, AGC 18dB) : 0.03 lx {25%, F1.2, AGC 18dB,

SLOW 32/60 (50) }

Lens mount

Video S/N

: C/CS mount

Power supply Power consumption : AC 24 V 50/60 Hz or DC 12 V

6.6 W

Ambient temperatures

: -10 to 50°C (operation), 0 to 40°C (recommended)

Weight : 660 a

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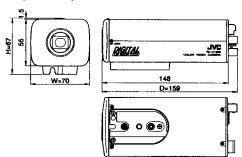
Accessories

: • 4-pin iris plug × 1

 Ferrite core × 2

Communication cable × 1

Dimensions (Unit: mm)



Design and specifications are subject to change without notice.





COLOR VIDEO CAMERA