

**JVC**  
PROFESSIONAL

**THE EYES OF YOUR COMPUTER**



# Compact, multi-purpose and high quality. JVC's latest camera specifically designed for computer imaging.

Following our extremely popular TK-870U, the TK-1070U is a high-resolution color video camera designed specifically for use as the input peripheral in personal computer image-capture applications. The TK-1070U uses a CCD device with 768(H) x 493(V) elements; together with the RGB filter, this makes color reproduction extremely accurate and gives a horizontal resolution of 480 TV lines. With one touch, it converts both RGB signals and Y/C separate signals for outputting.

## Various signals output

**RGB:** The TK-1070U is equipped with D-sub 9-pin which connects directly to an appropriate image capture board. Moreover, it's compatible with "Targa"\* and "Vista."\*

**Y/C:** The TK-1070U is easily switched with Y/C (output through D-sub 9 pin).

**Composite video:** 2 way outputs.

(D-sub 9 pin and BNC)

\*TARGA and VISTA are registered trademarks of Truevision, Inc.

## Synchronization

Full Genlock and HD/VD lock. (Sub-carrier free)

## C-Mount Lens

Using a C-Mount gives the widest choice of lenses. With a C-Mount adapter, it is also possible to use 35 mm SLR lenses. Several JVC lenses are available.

## Auto White Balance

3 modes for adjusting color temperature.

- Auto (6 bit, 2800-6000°K)
- Preset 3200°K
- Manual (2800-7000°K with 2 Axes (B-R, G-Mg))

## Electronic shutter

Selection possible from 1/100 (FL), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000.

## Others

- Gain-up functions Auto/Manual.
- Gamma 0.45/1.0 selectable.
- DTL (aperture) on/off.
- RGB or Y/C select.



# TK-1070U

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**Pickup Element:** 2/3" CCD, Frame Integration System

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**Synchronizing System:** Internal/External  
(VBS or BB, H.V-lock (Sub-Carrier Free))

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**Resolution:** 480 TV lines (600 x 400 pixels)

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**Minimum Required Illumination:** 15 Lux at F1.4

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**S/N:** 48dB (AGC OFF,  $\gamma$ 0.45, DTL OFF Weighted)

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**Electronic Shutter:** 1/100 (FL), 1/125, 1/250, 1/500, 1/1000,  
1/2000, 1/4000, 1/10000

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**Gain:** AGC AUTO/MANUAL

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**Gamma:** 0.45/1.0 selectable

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**White Balance:** Auto: 2,800~6,000°K (Set Memory Type 6 bit)  
Manual: 2,800~7,000°K (2 Peculier Axes)  
Pre-Set: 3,200°K

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**Operating Temperature:** 0° ~ 40°C

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**Lens Mount:** C-mount

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**Video Output:** RGB: 0.7Vp-p, 75 ohms Y/C: Y: 1.0Vp-p, 75 ohms  
C: 0.286Vp-p, 75 ohms VBS: 1.0Vp-p, 75 ohms

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**Sync Output:** 2.0Vp-p, 75 ohms

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**Power Requirement:** 12V DC  $\pm$  10%

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**Power Consumption:** 7.5W

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**Weight:** Approx 690g (only body)

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# Excellent 3-CCD imaging device with enhanced resolution and multiple output signals.

## 3-CCD color camera produces high quality pictures, making it ideal for CI (computer imaging)

- By use of a high-precision F1.4 prism optical system and CCD elements with 330,000 effective pixels, a horizontal resolution of 500 lines can be obtained on each of the R, G and B channels.
- Controls grouped for ease of operation.
- Through the use of CCD elements, geometrical distortion, burn and image lag are minimized.
- CCDs are highly resistant to vibrations and are not affected by terrestrial magnetism.

## High-resolution mode

The KY-F30U has a unique "HI-RESO/NORMAL" switch that lets you achieve the maximum vertical resolution possible from the CCDs. In the NORMAL position, it functions like a standard video camera, reading out the CCDs 2 lines at a time. In the HI-RESO position, vertical resolution is increased because each row of pixels is transferred individually.

## Wide range of output terminals

- 9-Pin D-SUB terminal for connection to personal computer supplies R, G, B and sync or composite video signal.
- Y/C 358 terminal supplies separate Y/C signal, compatible with S-VHS.
- BNC terminal supplies composite video signal.

## Automatic switching between internal sync and external genlock

This makes it easy to use the camera both on its own or in systems where images from more than one camera are processed.

## Positive/negative signal selection

A switch is provided for the selection of positive or negative images, so that positive images can be obtained from negative film.

## LEDs indicate video signal output level

The output level of the video signal is indicated by three LEDs, a green LED indicating the correct level and red LEDs indicating that the signal is too high or low. This facilitates the adjustment of the lighting and the aperture.

## Built-in electronic shutter

The KY-F30U incorporates a selectable 1/500 second electronic shutter, making the camera suitable for the analysis of motion, etc.



Lens is optional

# KY-F30U

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**Image Pickup Device:** 1/2" Interline Transfer 3 CCD

**Number of Pixels:** 668 x 485 pixels

**Color System:** NTSC

**Genlocking Input:** Composite Video Signal, VBS, 1Vp-p, 75 ohm  
(or black burst signal) BNC connector

**Color Bars Generator:** Built-in

**Sensitivity:** F4, 2000lux

**S/N Ratio:** 58dB (gamma 1, matrix OFF, bandwidth 4.2MHz)

**Registration:** All Ranges, 0.05% (excluding lens distortion)

**Contour Collection:** Horizontal dual edged  
Vertical dual edged (with 2H comb filter)

**Electric Shutter:** 1/60, 1/500 (high-resolution shutter mode)

**Operating Temperature:** -5°C ~ +45°C

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**Video Out:** RGB: Composite video signal VBS 1Vp-p, 75 ohm

R signal: 0.7Vp-p, 75 ohm

G signal: 0.7Vp-p, 75 ohm

B signal: 0.7Vp-p, 75 ohm (without SYNC)

Composite sync signal: 0.3Vp-p, 75 ohm

Y/C 358: Y signal: VS 1Vp-p, 75 ohm

C signal: 0.286 Vp-p (burst level), 75 ohm

Video: Composite video signal VBS 1Vp-p, 75 ohm  
BNC connector

**Synchronizing System:** Internal/External

**Standard Lens:** HZ-H713U (option)

**Lens Mount:** 1/2" Bayonet Mount

**Power Requirement:** 12V DC

**Power Consumption:** 1.3A

**Weight:** 1.2kg

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**JVC presents advanced technology with its complete line-up of video cameras that meet today's high-performance needs in computer imaging applications.**

Thanks to advancements in computer imaging technology, computer imaging is now being applied to every possible field. Video cameras for computer imaging are now considered the most appropriate devices to bring an image into a computer. As the leading manufacturer of computer imaging video cameras, JVC has made great gains in the development of such cameras. We examine the needs of consumers from a variety of angles, including high fidelity and performance, simplicity in usage and compatibility. And we are now proud to introduce our 5 models. This deluxe line-up is sure to satisfy all your requirements. When it comes to computer imaging video cameras, you only need to look at JVC.







## High quality and compact video cameras.

Engineered for sensitivity and to remain reasonably priced, our cameras can be used for teleconferences, and on microscopes and other medical equipment, as well as for a wide range of other applications.

- 420 TV lines of horizontal resolution
- Minimum Sensitivity: 5 Lux (F1.2, AGC ON)
- Two kinds of video output signal Y/C: 4 pin, Composite video: BNC
- C/CS lens mount
- External Sync (VBS or BB) for synchronization
- Electronic shutter 1/250, 1/500, 1/1000



Lens is optional

# TK 1080U

- 330 TV lines for horizontal resolution.
- Minimum Sensitivity: 2.5 Lux (F1.2, AGC ON).
- C/CS lens mount.
- Composite video out.
- External sync (VBS or BB) for synchronization.
- Electronic shutter: 1/100, 1/1000



Lens is optional

# TK-980U

	TK-1080U	TK-980U
<b>Pickup Element:</b>	1/2" CCD With Mosaic Color Filter (Y-Cy-Mg-G)	
<b>Synchronizing System:</b>	Internal/External (VBS or BB)/AC Line Lock	
<b>Resolution:</b>	420 TV lines	330 TV lines
<b>Minimum Required Illumination:</b>	5 Lux at F1.2	2.5 Lux at F1.2
<b>S/N:</b>	48dB (AGC OFF, 2000 Lux)	47dB (AGC OFF, 2000 Lux)
	1/60, 1/250, 1/500, 1/1000	1/60, 1/100, 1/1000
<b>Gain:</b>	OFF/ON (Max +20dB)	
<b>White Balance:</b>	TTL Auto: 2,850~7,000°K/Fluorescent Light/Sunlight/Manual: 2 Color Axes, B-R, G-Mg	
<b>Lens Mount:</b>	CS/C (with adapter)	
<b>Video Output:</b>	Composite Video: 1.0Vp-p, 75 ohms Y/C: Y 1.0 Vp-p, C 0.286 Vp-p, 75 ohms	Composite Video: 1.0Vp-p, 75 ohms
<b>Power Requirement:</b>	24V AC or 12V DC	

# The TK-870U provides a well proven blend of ease-of-handling with excellent quality.

TK-870U is an easy-to-use video camera that produces high quality pictures. The excellent CCD makes handling easy for anyone without image lag or burn. With the C-mount, a wide range of lenses can be selected.

## CCD Pickup

A 2/3" CCD is used as the pickup element; this solid-state device is extremely durable and resistant to shocks. It results in the excellent resolution of 330TV lines (440 x 400 pixels) with no comet tails, image lag or burn.

## Various Signals Output

RGB: The TK-870U supplies with its RGB output terminal (D-sub 9-pin), red; green and blue, composite video and Sync signals suitable for input to a computer digitizer system. With discrete RGB signals, these systems can perform image processing without color crosstalk.  
Composite video: 2 way outputs (D-sub 9 pin and BNC).

## Compatible with TARGA\* Board

The TK-870U is specifically designed for use in advanced image processing systems with a comprehensive range of professional applications. When used with a TARGA or similar image capture board, the TK-870U demonstrates its full potential.

\*TARGA is a registered trademark of TRUEVISION, Inc.

## C Lens Mount

With the C mount exchanging lenses is easy and a wide range of lenses can be selected. This simplifies the connection of the TK-870U to microscopes, telescopes and other optical systems. With appropriate adapters, lenses designed for use with 35 mm SLR cameras can be used with the TK-870U.



# TK-870U

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**Pickup Element:** 2/3" CCD, Frame Integration System

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**Scanning Frequency:** H = 15.734kHz, V = 59.94Hz

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**Synchronizing System:** Internal/External

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**Resolution:** 330 TV Lines (440 x 400 pixels)

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**Minimum Required Illumination:** 20 Lux at F1.4

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**S/N:** 45dB (AGC OFF Weighted)

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**White Balance:** Pre-Set Outdoor: 5500°K Indoor: 3200°K

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**Operating Temperature:** 0°C ~ 40°C

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**Video Output:** RGB: 0.7Vp-p, 75 ohms VBS: 1.0Vp-p, 75 ohms

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**Sync Output:** 0.3Vp-p, 75 ohms

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**Power Requirement:** 12V DC ± 10%

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**Power Consumption:** 5.8W

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**Weight:** 860g

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# OPTIONAL ACCESSORIES

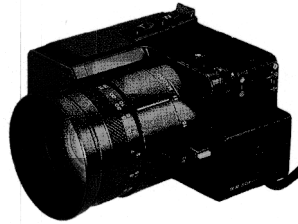
**HZ-713MDU**  
X13 Motorized zoom lens



**HZ-H713U**  
X13 Zoom lens



**HZ-C611AF(U)**  
C-mount autofocus lens



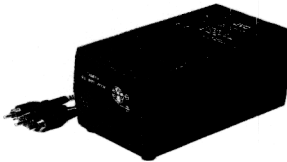
**RM-713MDU**  
Remote control unit  
for HZ-713 MDU



**RM-LP80U**  
Local remote control unit



**AC-C412(P)**  
AC adapter kit for TK-870U



**AC-C612**  
AC adapter kit  
for TK-1080U, TK-980U



**AC-C712**  
AC adapter kit for TK-1070U



**VC-463-2U**  
Camera cable



Cable length: 6.6ft (2m)

**VC-464-4U**  
Camera cable



Cable length: 13.2ft (4m)

**VC-451-2U**  
Camera cable



Cable length: 6.6ft (2m)

**VC-452-2U**  
Camera cable



Cable length: 6.6ft (2m)



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