KY-F70U
3-CCD DIGITAL CAMERA

New Product News

Progressive Scan SXGA Digital Images

High Resolution SXGA Digital Image Capture with SCSI Output and Full Motion Live Color Preview
JVC’s KY-F70U: the flexible and adaptable digital solution to industrial photographic requirements

Whether used on a scope or with a lens attached, the KY-F70U delivers still images with a level of resolution and a quality of color which greatly surpass conventional 3-CCD video technology. The KY-F70U Digital Imaging System interfaces directly to a PC via SCSI-2 and so can capture SXGA resolution images directly without an image capture board, whilst still offering full-motion live color preview in real-time. Furthermore, interfaced with a PC capture board, it can deliver SXGA resolution into an even wider range of applications. The SCSI interface can be switched simply from Slave to Master for connection directly to the SCSI port of a printer, for example, thus directly providing high res SXGA images without the intervention of a PC.

KEY FEATURES

The KY-F70U is an ultra-compact, multi-purpose 1,360 x 1,024 pixel resolution imaging system that interfaces readily with C-mount lenses, microscopes, and other imaging apparatus. It features the convenience of internal frame memory. This means that digital image output can be either direct or from the frame memory into PC, printer or storage device.

- SXGA Picture Resolution 1,360 x 1,024
- Effective 4.35 million square-pixel on-chip progressive-scan CCD with 1.45 million effective pixels for each color
- Live color preview (VGA) for speed, ease and accuracy
- 1/2 inch C-mount to fit on wide variety of lenses and scopes
- 3-CCD block with color separation prism
- 1,360 x 1,024 pixel (1,000-TV line) horizontal and vertical resolution
- SCSI-2 interface allows direct digital transfer to PC, and direct control of printer or storage media.
- TWAIN driver software for capturing included, plus RS-232C camera control software available, allowing easy shooting from PC. 32-bit Windows 98 version already available.
- Built-in 32-bit RISC CPU for faster memory control response
- Combination with additional PC capture boards realizes fast access (processing) to PC.
- Up to 3 m umbilical SCSI-2 cord from PC to final termination
- External trigger with flash synchronization
- Picture frames are stored in uncompressed TIFF form to prevent degradation.
- Automatic Video Level adjustment
- IEC 601-1 approval for medical use (with AA-P700)
- Four uncompressed SXGA images may be stored in the internal Frame Memory.
- Camera set-up is carried out by on-screen menus which cater for wide range of applications.
1. Direct Digital Connection for Printing or Storage

This system does not require a PC. Live color preview on the monitor allows selection of the images to be captured to Printer or MO disk.

- Connect to the power supply
- AC adapter
- MO disk drive
- Printers
- Connect the MO drive unit
- Connect the printer

(Compatibility: Mitsubishi CP700DSU/DSE and CP800DW)

2. Direct PC Capturing System

Via the SCSI terminal, high resolution SXGA images can be captured directly to a PC. Live color preview allows selection of the images.
- The camera can be controlled via the PC. In this system the PC is the SCSI host and the camera is the SCSI peripheral.
- Images captured to a PC may be processed and manipulated in application software such as Photoshop®.
- To run this system, the JVC camera remote control software and the TWAIN 32 capture software need to be installed in the PC.

3. PC System Using Capture Board

Via the 15-pin RGB port, SXGA resolution images may be captured with an appropriate Image Digitizing Board. Live color preview is available on the PC screen and captured images can be verified at their full resolution.

- To run this system, the JVC camera remote control software and the TWAIN 32 capture software need to be installed in the PC.

- Images captured to a PC may be processed and manipulated in application software such as Photoshop®.

KY-F70U Actual Digital Image
The Hachioji Plant of Victor Company of Japan, Ltd., has received ISO14001 Certification under the global standard for environmental management.

**SPECIFICATIONS**

- **Image device**: 1/2-inch Interline Transfer CCD x 3
- **Total pixels**: 4.35 million (3 x 1.45 million) pixels
- **Effective pixels for CCD**: 1.45 million pixels (H: 1,392 x V: 1,040)
- **Output pixels**: 1,360 x 1,024
- **Optical system**: Dichroic prism
- **Aspect ratio**: 4:3
- **Lens mount**: 1/2-inch C mount
- **Analog output**: R/G/B 0.7 V(p-p) 75 ohms each
- **Output mode**: SXGA: 1,360 x 1,024 pixels 7.5 frames/sec.
  VGA: 640 x 480 pixels 60 frames/sec.
  (Image refresh rate 7.5 frames/sec.)
  VGA: 640 x 480 pixels 60 frames/sec.
  (Image refresh rate 30 frames/sec.,
  vertical resolution: 240 lines)
- **Output signal is selectable from above three modes**
- **Digital output**: SCSI-2 50P half-pitch SCSI connector
- **Sync output**: Hs/Vs 3 V(p-p) (low active)
- **Image memory**: 5 frames (4 frames when selecting SXGA analog output)
- **Sensitivity**: ISO100 equivalent
- **Quantization**: 10 bit in 8 bit out
- **White balance**: Auto and manual (menu)
- **Gain**: ISO100, 200, 400 (menu)
- **Electric shutter**: 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250,
  1/500, 1/1000, 1/2000, V.SCAN, EEI (menu)
- **Flare compensation**: (Menu)
- **Dynamic shading**: (Menu)
- **Operating temperature**: 0 — 40 °C
- **Input voltage**: DC12V
- **Weight**: Approx. 15W
- **Approx. 850g (1.9 lbs.)
- **Dimensions (W x H x D)**: 70 x 80 x 150mm
  2-13/16 x 3-3/16 x 5-15/16 inches

**SYSTEM REQUIREMENTS FOR PC**

- **CPU**: Pentium® 166 MHz or faster
- **At least 20 MB of RAM**
- **At least 10 MB of available hard-disk space**
- **Serial port (RS-232C)**
- **SCSI-2 board (Adaptec AHA-2940AU recommended)**
- **Color monitor with 16,770,000-color recommended**
- **Floppy disc drive**
- **Windows® 95, Windows® NT 4.0**
- **TWAIN graphic software such as Adobe® Photoshop® installed**

*Windows® 95, Windows® NT 4.0, Adobe® Photoshop® and Pentium® are registered trademarks.

**DIMENSIONS**

- **Unit: mm (inches)**
- **70 (2-13/16) x 80 (3-3/16) x 88 (3-1/2)**
- **3-1/2 x 3-3/16 x 5-15/16 inches**

**OPTIONS**

- **AA-P700 AC Power Adapter**

**RECOMMENDED PRINTERS**

- **MITSUBISHI COLOR PRINTER**
  - **CP800DW**
  - **CP700DSU/DSE**

**Photo**: CP800DW

Design and specifications subject to change without notice.