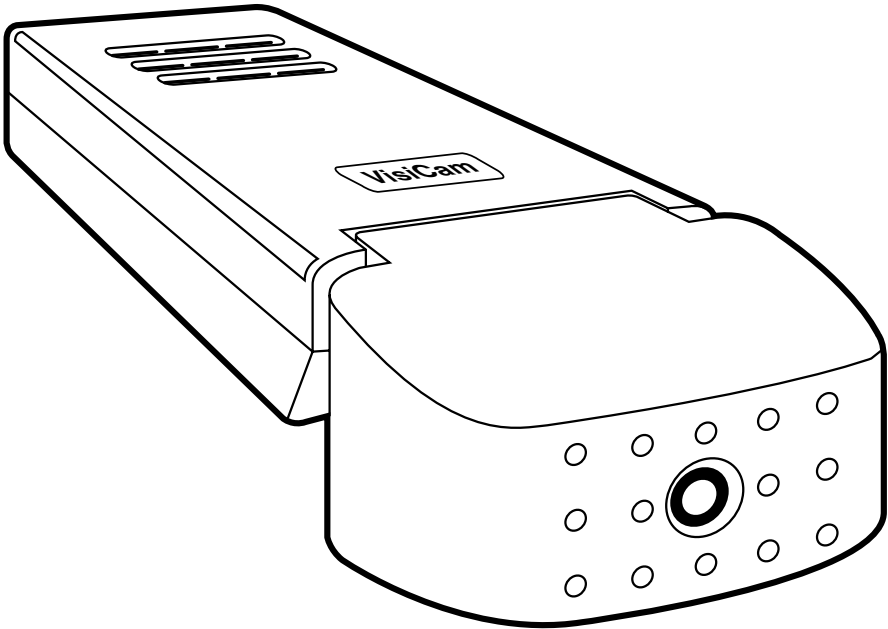




MAY 1998
AC350A, AC350AE
AC351A, AC351AE
AC352A, AC352AE
AC353A, AC353AE

VisiCam B/W VisiCam Color



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**FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT**

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for Radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par Industrie Canada.

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1. Specifications

Image Device —	1/3" Interline Transfer CCD
Resolution —	B/W: Horizontal 350 TV Lines Color: Horizontal 330 TV Lines
Pixels —	510(H) x 492(V)
Iris System —	Electronic Auto Iris
Focal Length —	4.0 mm
Viewing Angle —	72°(H); 53°(V)
Signal System —	NTSC (RS170)
Sync System —	Internal
Signal/Noise —	46dB
Video Output —	1.0 Vp-p, 75Ω, Composite
Object Distance Range —	1 foot (0.3 m) to ∞
Minimum Illumination —	B/W: 20 lux Color: 10 lux at f1.4
White Balance —	B/W: N/A Color: TTL Auto Trace
Automatic Gain Control —	B/W: N/A Color: +18dB
Operating Temperature —	-5 to +55°C (23 to 131°F)
Storage Temperature —	-10 to +60°C (14 to 140°F)
Power Requirements —	B/W: 12V DC, 160 mA Typical Color: 12V DC, 400 mA Typical
Power Consumption —	B/W: 1920 mW Color: 4800 mW
Size —	1.8"(H) x 2.8"(W) x 7.7"(D) (4.6 x 7.1 x 19.6 cm)
Weight (camera only) —	10 oz. (284 g)
Shipping Weight —	3 lb. (1.4 kg)

2. Introduction

The VisiCam is a video camera that can support a wide range of applications, such as QuickTime™ movies, Video for Windows, videoconferencing, video mail, desktop presentations, and security systems. The camera is compatible with any personal computer equipped with a video-digitizing board. No additional software is needed. The video-digitizing hardware will control video functions such as brightness, contrast, pan, and zoom.

The VisiCam's electronics are designed to maximize performance and produce quality images. Its precision optics and controls are optimized for motion compression standards such as JPEG, MPEG,

DVI, and CCITT H.261. The VisiCam is housed in an ergonomic package which sits unobtrusively on your computer monitor. You can also mount the VisiCam on a standard tripod.

The AC350A and AC351A packages should include:

- VisiCam.
- DC Power Adapter.
- RCA to RCA Video Cable.
- This Manual.

The AC352A and AC353A packages should include:

- VisiCam.
- RCA to RCA Video Cable.
- This Manual.

3. Installation

Full installation assumes that you have a destination device, such as a VCR, television, or computer equipped with video-digitizing hardware, that makes use of the video information output of the VisiCam. The destination device must be able to accept NTSC video input.

Step 1. VisiCam Placement

Place the VisiCam on top of your computer monitor (or wherever you intend to keep it).

Step 2. The VIDEO Connection

Attach the supplied RCA® video cable to the VisiCam's RCA connector labeled VIDEO. Attach the other end to your digitizer, VCR, television monitor, or other destination device.

Step 3. The POWER Connection

Attach the AC power adapter plug to the VisiCam connector labeled POWER. Plug the transformer into a standard AC socket.

The image of what is in front of the VisiCam should display on the connected video device.

4. Operation and Troubleshooting

Operation

Once the VisiCam is installed, operation is automatic. There are no adjustments that you make to the VisiCam.

The camera outputs a standard NTSC baseband video signal. The specifications are as follows:

- Signal Level: 1Vp-p into 75 ohms
- Horizontal Frequency: 15,750 Hz
- Vertical Frequency: 60 Hz (interlaced)

If the destination device does not support the video output format, the picture will be defective.

Troubleshooting

- **Problem:** No picture of any sort.

Solution: First, check your power connection. Sometimes the adapter is plugged into a switched outlet: Make sure the switch is on. Verify that the power plug is pushed all the way into the appropriate jack on the camera.

Next, check the video connection. Connect the RCA video cable to a different television or computer monitor to check whether the

problem is with your video output device. You might also want to try attaching a different RCA video cable to the VisiCam and the monitor.

If the problem still occurs, check the front of the camera for possible lens obstruction.

- **Problem:** The picture runs in a horizontal or vertical direction.

Solution: Adjust the horizontal or vertical hold on the destination device.

If the picture is distorted diagonally, the standards of the equipment may be mismatched. The VisiCam is an NTSC (video standard for North America) camera. The video destination might be PAL (video standard for Europe), instead of NTSC.

- **Problem:** Picture has wide horizontal bands of varying intensity.

Solution: The line power may be too low. Check the power specified on the AC transformer to make sure it is compatible with your local power supply.

5. Glossary

CCD (Charge Coupled Device) — an integrated circuit which has the ability to respond to light.

CCITT (Consultative Committee for International Telephony and Telegraphy) — International organization for communications standards based in Geneva, Switzerland.

DVI (Digital Video Interactive) — The Intel® family of digital video and audio products.

Digitizer — a device used to convert analog video signals to a digital format for use on a computer system.

H.261 — a CCITT video codec standard using intraframe and interframe compression to transmit video over Px64 ISDN lines.

JPEG (Joint Photographic Experts Group) — standards committee attempting to define a standard algorithm for the digital compression and decompression of still images.

MPEG (Motion Picture Experts Group) — standards committee working on algorithm standards for compressing video images.

NTSC (National Television System Committee) — the North American television standard, which uses 525 lines of resolution. Also used in Central America, South America, and parts of Asia.

PAL (Phase Alternating Line) — the European television standard, which uses 625 lines of resolution.

QuickTime — a system extension to the Apple® System 7™ operating system which includes compression schemes for time-based data such as graphics, animation and video.

RS170 (Electronic Industry Association Recommended Standard 170) — the standard for NTSC composite video.

Video for Windows — The Microsoft® multimedia extensions, which allow a computer running Windows™ to control animation, sound and video devices.



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