

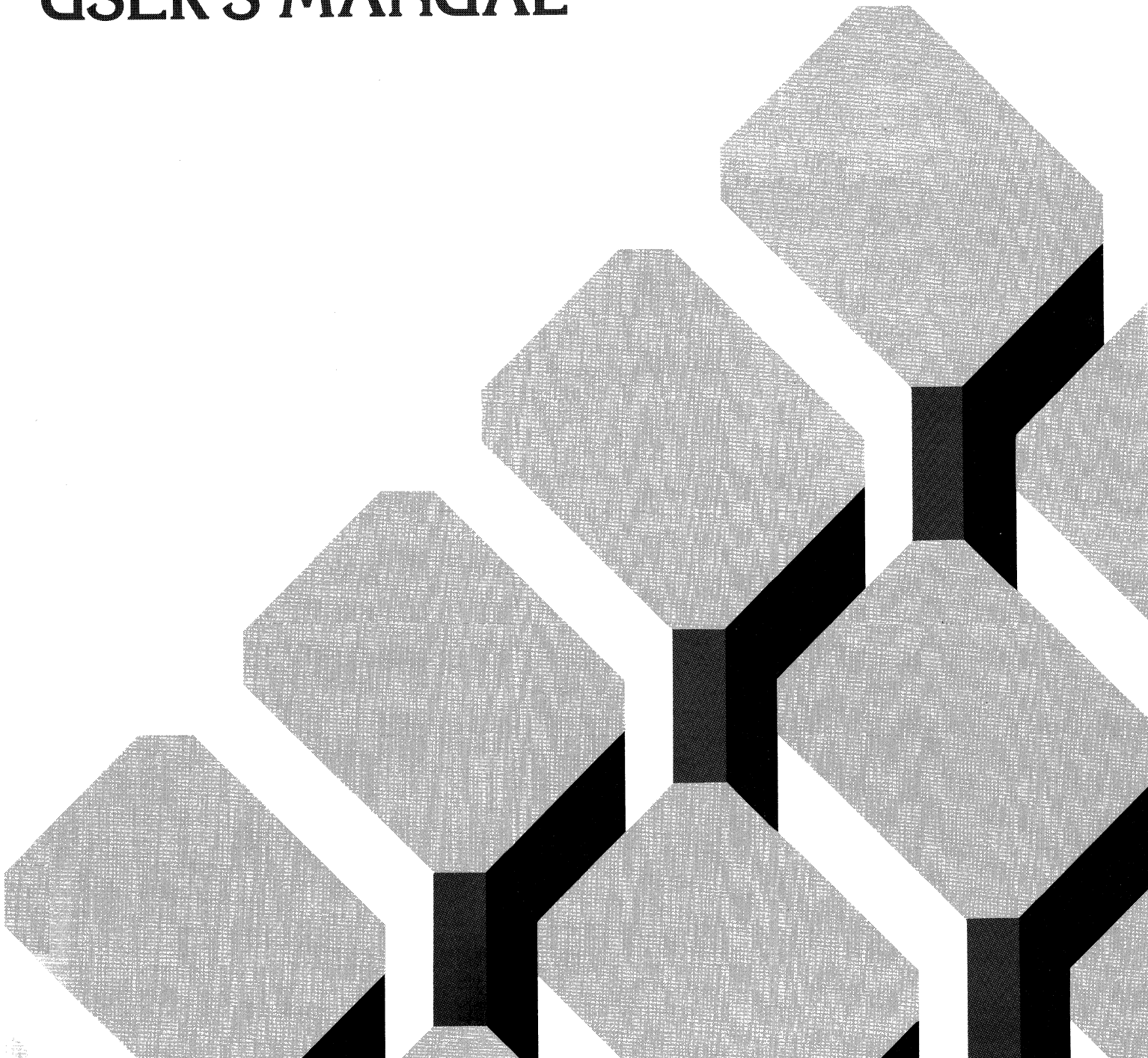


**data
systems**

THE QUALITY GOES IN BEFORE THE NAME GOES ON

COLOR VIDEO MONITOR

USER'S MANUAL



Color Video Monitor

Models ZVM-134
& ZVM-134E

206-00745

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United States of America

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St. Joseph, Michigan 49085

REGULATORY AND REGISTRATION INFORMATION

Warning — This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC Rules. Only computers certified to comply with the Class B limits may be attached to this equipment. Operation with non-certified computers is likely to result in interference to radio and TV reception. This equipment uses radio frequency energy for its operation and if not installed and used properly, that is, in strict accordance with the instruction manual, may cause interference to radio and television reception. It has been type tested and found to comply with the RF emission limits for a Class B computing device which is intended to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Move the computing device away from the receiver being interfered with.
- Relocate (turn) the computing device with respect to the receiver.
- Reorient the radio or television receiving antenna.
- Plug the computing device into a different AC outlet so that the computing device and receiver are on different branch circuits.
- Disconnect and remove any I/O cables that are not being used. (**Unterminated** I/O cables are a potential source of high RF emission levels.)
- Unplug and remove any circuit boards that are not being used. (Here again, **unterminated** cards can be a source of potential interference.)
- Be certain that the computing device is plugged into grounded outlet receptacles. (Avoid using A/C cheater plugs. Lifting of the power cord ground may increase RF emission levels and may also present a lethal shock hazard to the user.)

If you need additional help, consult your dealer or ask for assistance from the manufacturer. Customer service information may be found on the inside back cover of this manual or on an insert sheet supplied with the equipment. You may also find the following booklet helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the US Government Printing Office, Washington, D.C. 20402 — Stock No. 004-000-000345-4.

ZENITH ENGINEERING

The device has been designed and manufactured to comply with all applicable rules and regulations of the following agencies:

Underwriters Laboratories
Canadian Standards Association
Federal Communications Commission — Part 15, Radio Frequency Interference

Any attempt to alter or modify the design, or to use this device in a manner other than described in the Manual, will void the Warranty and release the manufacturer from any responsibility for its operation.

REGISTRATION

To receive the full benefits of your Warranty, complete and mail the accompanying Registration Card. Also, record the series and serial number of your equipment below. Refer to these numbers in any correspondence you have with Zenith Data Systems regarding this equipment.

Model _____

Series _____

Serial # _____

Date Purchased _____

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COLOR VIDEO MONITOR

INTRODUCTION

Congratulations on your purchase of the Zenith Data Systems Color Video Monitor. This Monitor can display RGB color video signals; the red, green, and blue signals necessary to produce color; to provide you with a professional visual presentation. They connect directly to the Color Monitor and therefore usually produce a better display than other monitors that use RF modulated signals that have to be demodulated — like in a television set.

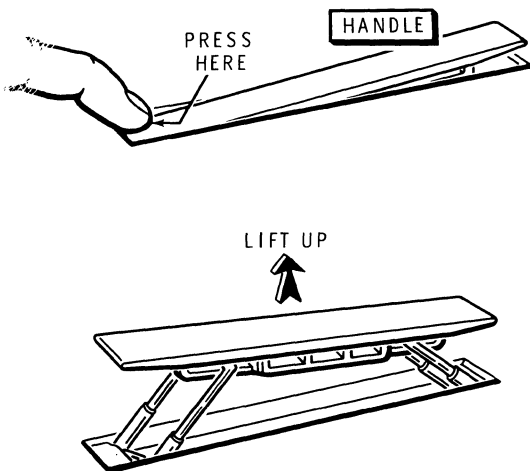
A high-quality color picture is assured by the automatic color processing circuits that have been engineered into the Monitor. The vertical and horizontal portions of the display are held rock-steady by specialized circuits, so that the customary vertical and horizontal hold controls are not needed.

Your new Color Monitor has been carefully adjusted and fine-tuned at the factory for a good display. To obtain the most use and satisfaction from it, please take a few minutes to read this Manual before you use your new Monitor.

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UNPACKING

Carefully remove the Monitor from its packing material; lift it out by its handle. To grasp the handle, refer to Pictorial 1 and press down on either end of it.



PICTORIAL 1
Accessing the handle.

INSTALLATION

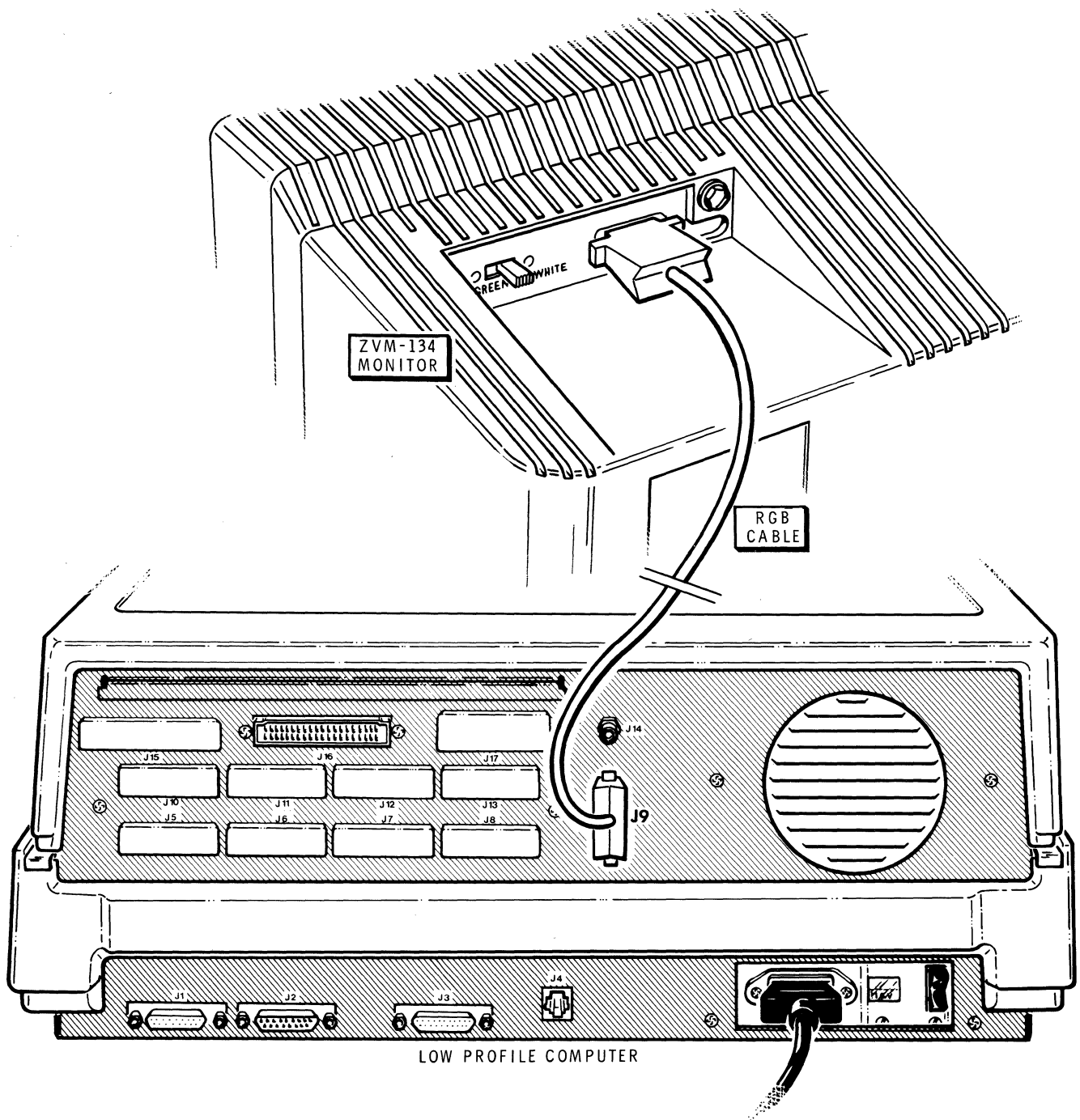
Location — Choose a place for your Color Monitor where there is a comfortable light level for viewing the screen. Sunlight or bright light should not fall directly on the screen, as this will have a tendency to “wash out” the display and make viewing difficult. Also allow for a comfortable viewing distance and select a good solid surface to set the Monitor on.

Ventilation — Proper ventilation is important because it helps keep your Monitor running cool, and cool operation almost always extends the life of an electronic product. On the bottom, back, and top of the cabinet there are slots which permit air to flow. Therefore, be sure you do not enclose the cabinet or otherwise obstruct the ventilation slots.

Power — Your Monitor is designed to operate on 120 volts, 60 Hertz AC (unless you purchased the ZVM-134E, which operates on 220 volts 50 Hertz AC). Choose a location near such an AC outlet and NEVER attempt to operate the Monitor on DC.

Warning — Do not expose this Color Monitor to rain or moisture, and never operate the unit if liquid has been spilled into it. If this happens, have your Monitor checked by a service technician before you use it again. A fire or an electric shock could result if you do not take this precaution.

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PICTORIAL 2
Cable connection.

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OPERATION

- () Refer to Pictorial 2 and connect an RGB video cable to your Computer and to the RGB connector on the back of your Color Monitor.
- () Position the rear panel GREEN/WHITE switch to WHITE if you want a white or color display, or to GREEN if you want a monochrome (green) display.
- () Connect the line cord to an AC outlet.
- () Refer to Pictorial 3, Page 8, and turn the ON-OFF switch to the right to turn on the Monitor.

HELPFUL HINTS

Never attempt to operate the Monitor with the back cover removed, and never probe or push objects into the unit through the cabinet slots. A serious electric shock could result.

If the cabinet has been damaged, do not operate the Monitor. Have it checked by a service technician before you use it.

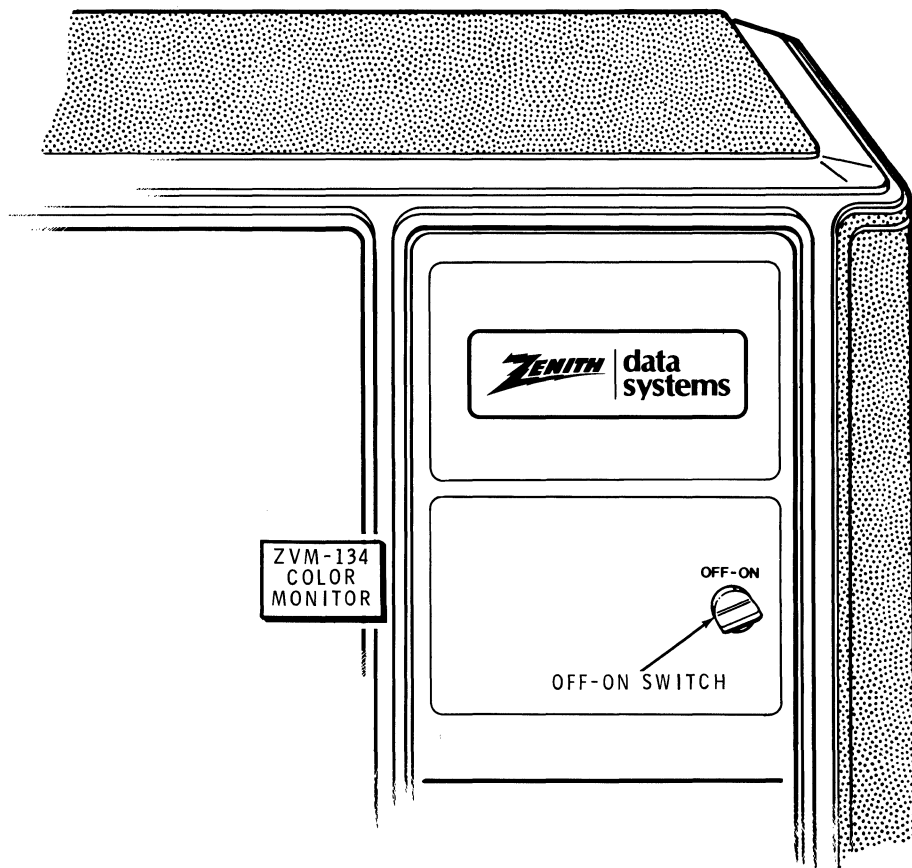
Picture-Glass Cleaning

When you want to clean the face plate of the picture tube, first turn the Monitor off. Then wet a cloth in lukewarm water mixed with a little fabric softener or dishwashing detergent. Wring the cloth almost dry and then wipe the glass. Make sure that no drops of moisture are squeezed onto the glass. Do NOT wipe the glass dry. Let it air-dry before you turn the Monitor back on.

Care Of Cabinet

The cabinet should be cleaned with a mild soap solution. Use a soft cloth. Rinse the cloth with clear water before you wipe it dry.

COLOR VIDEO MONITOR



PICTORIAL 3

Off-On switch.

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IN CASE OF DIFFICULTY

All ZDS Computer hardware and software products were designed to work together as a complete system. Proper operation can be assured only when your Monitor is used with ZDS designed or approved accessories. ZDS does not assume the responsibility for improper operation resulting from custom interfacing, custom software, or the use of accessories not approved by Zenith Data Systems.

All the Monitor components have been wired and tested by ZDS. If you encounter any malfunction during the warranty period, call your Zenith Data Systems dealer or authorized Zenith Data Systems repair facility to arrange for service. Do NOT attempt to service this Monitor yourself during the warranty period; to do so may void the warranty.

You may have out-of-warranty products repaired by your Zenith Data Systems dealer or authorized Zenith Data Systems repair facility. You may wish to obtain a maintenance contract for your Monitor.

If you cannot locate a Zenith Data Systems dealer or repair facility, call 1-800-447-4700 (in Illinois, 1-800-322-4400) for the name and location of the one nearest you.

If you have difficulty with the video produced by your Color Monitor, the trouble may be:

- In the Interconnecting cable.
- In the Computer.
- In the Color Monitor.

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First, determine which component is at fault by making the following tests:

- Check to see that the Monitor and Computer are plugged into a working AC power source, and turned on.
- Be sure that the cable is properly plugged into both the Monitor and Computer. Then move the interconnecting cable back and forth, particularly near the ends. If the trouble varies or is intermittent, the cable is defective and must be replaced.
- If another Computer is available, connect the Monitor to it. If the Monitor now functions properly, the original Computer is defective. However, if the Monitor does not function properly, then it may be defective.

IMPORTANT: If you contact a Zenith Data Systems dealer or authorized Zenith Data Systems repair facility, try to list the following information about your Computer System. It will help them to diagnose and repair your Monitor.

- A. The problem you are having.
- B. The name, Model number, and Series number of your Computer System.
- C. The system configuration (including any peripherals you are using).
- D. Any additional information that will help describe your system.

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SPECIFICATIONS

Inputs	DB-15 type connector. R, G, and B signals — TTL positive. Composite — TTL positive or negative. Horiz sync — TTL positive or negative. Vert sync — TTL positive or negative. Ground.
CRT	13 inch, 90 degree, .43 mm fine pitch dot mask. 26 kV at 0 beam. 450 μ A max beam current. 100 volt cutoff. Internal magnetic shield. .7 mm max convergence error. Sealed system tube, yoke, beambender.
Operating Voltage	120 VAC, 60 Hz. "E" version: 240 VAC, 50 Hz.

Zenith Data Systems reserves the right to discontinue products and to change specifications at any time without incurring any obligation to incorporate new features in products previously sold.

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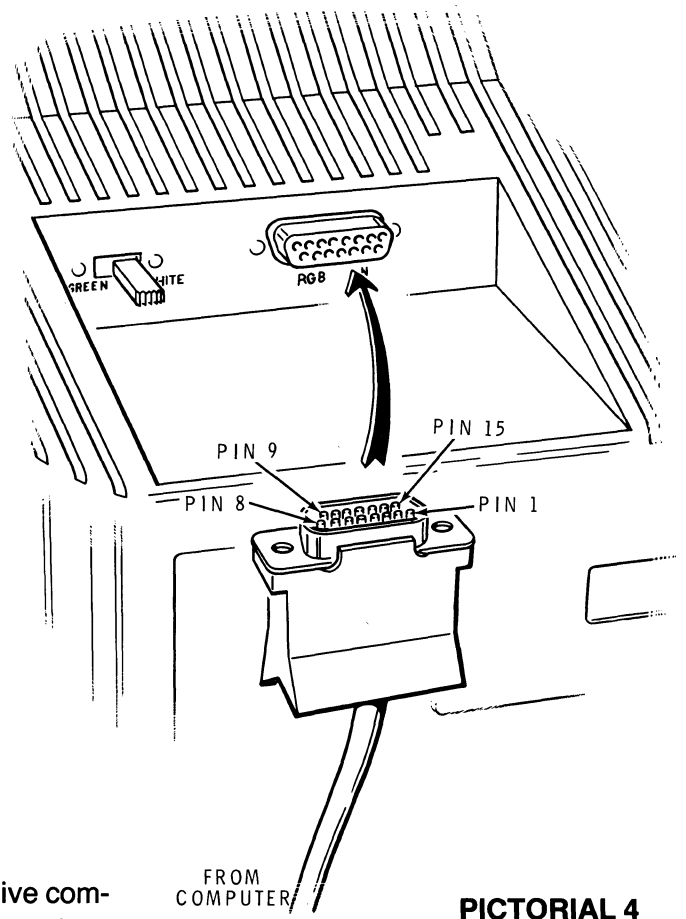
CABLE DESCRIPTIONS

The following two cables are available for your Color Monitor:

<u>CABLE</u>	<u>FOR COMPUTER</u>
ZVM-134-1	Z-100 family of Computers
ZVM-134-2	IBM

The connector pinout is as follows. See Pictorial 4.

<u>PIN #</u>	<u>SIGNAL</u>
1	-H
2	+H
3	not used
4	+V
5	G
6	B
7	R
8	not used
9	-V
10	not used
11	GND
12	not used
13	not used
14	not used
15	not used



PICTORIAL 4
Connector pinout.

NOTE: Composite sync can be used. However, negative composite sync must be applied to both pins 1 and 9, or positive composite sync must be applied to both pins 2 and 4. This will require a modified cable.



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