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# Texas Instruments

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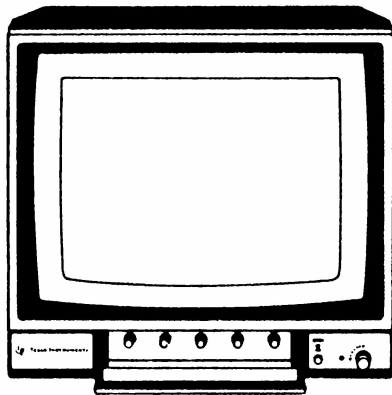
## Personal Computer

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### Operating Guide

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# Color Monitor



## **Federal Communications Commission Requirements Concerning Radio Frequency Interference**

The Texas Instruments Personal Computer and peripherals generate and use radio frequency (RF) energy. **If not installed and used properly** (as outlined in the instructions provided by Texas Instruments), this equipment may cause interference to radio and television reception.

This equipment has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Sub-part J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against radio and television 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 you can determine by turning the equipment off and on), try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna (that is, the antenna for the radio or television that is "receiving" the interference).
- Change the position of the computer with respect to the radio or television equipment that is receiving interference.
- Move the computer away from the equipment that is receiving interference.
- Plug the computer into a different wall outlet so that the computer and the equipment receiving interference are on different branch circuits.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from

The US Government Printing Office  
Washington, D.C. 20402

Please specify Stock Number 004-000-00345-4 when ordering copies.

**"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 peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this computer. Operation with non-certified peripherals is likely to result in interference to radio and TV reception."

# CONTENTS

<b>FIRST THINGS FIRST</b> (LOCATION AND CARE OF YOUR SET) .....	2
<b>CONTROL PANEL</b> .....	3
<b>CONNECTING YOUR PERSONAL COMPUTER</b> .....	5
<b>HOW TO GET A GOOD COLOR PICTURE</b> .....	6
<b>HELPFUL HINTS</b> .....	7
<b>INDIVIDUAL CONTROLS</b> .....	8
<b>MAINTENANCE AND SERVICE</b> .....	9
<b>LIMITED WARRANTY</b> .....	12

## IMPORTANT

Record the serial number from the back of the Color Monitor and purchase date in the space below. The serial number is identified by the words "SERIAL NO." on the back of the monitor. Always reference this information in any correspondence.

**PHA4100**

<b>Model No.</b>	<b>Serial No.</b>	<b>Purchase Date</b>
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Copyright © 1981 Texas Instruments Incorporated  
See important warranty information at back of book.

# FIRST THINGS FIRST

## **LOCATION**

Put your Color Monitor where sunlight or bright light will not fall directly on the screen. Allow a comfortable viewing distance.

## **VENTILATION**

Proper ventilation helps keep your unit running cool. Slots on the cabinet of the monitor permit air flow and help prevent heat buildup. **DO NOT ENCLOSE THE CABINET OR OTHERWISE OBSTRUCT VENTILATION THROUGH THESE SLOTS.**

## **POWER**

Your unit is designed to operate on 120 volt 60 Hz AC. **DO NOT ATTEMPT TO OPERATE THE UNIT ON DC.** The power supply cord has a plug with two blades and one grounding pin as a safety feature. **DO NOT ATTEMPT TO PLUG THE POWER CORD INTO A 2-HOLE WALL OUTLET. DO NOT USE AN ADAPTER OR ATTEMPT TO ALTER THE PLUG.** If the plug does not fit your wall outlet, contact your electrician.

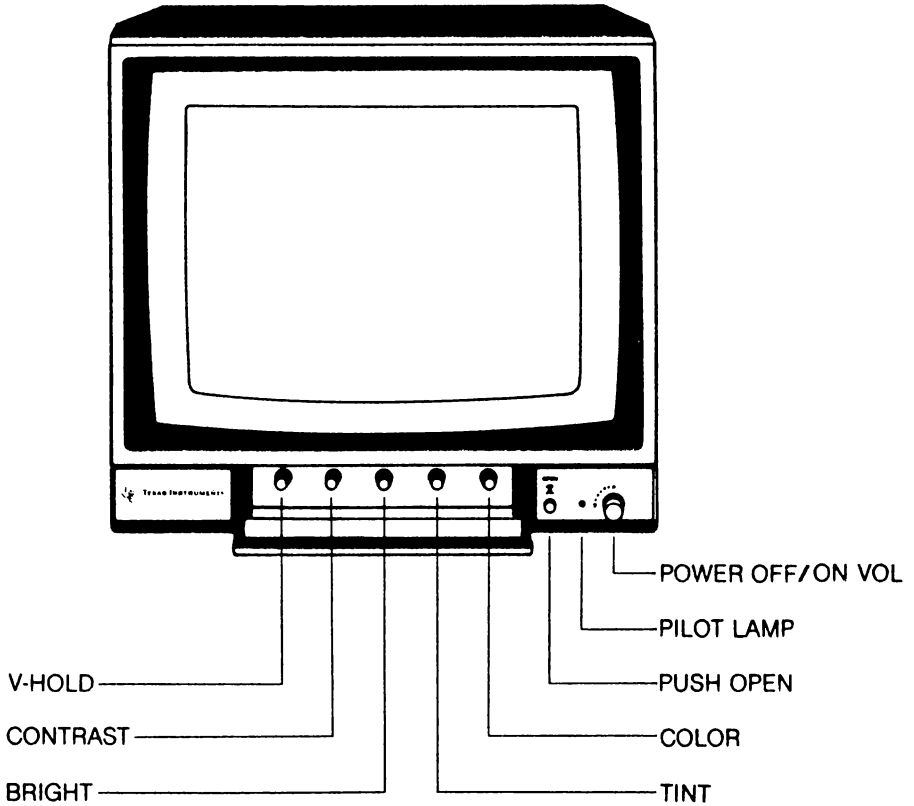
## **WARNING**

**DO NOT EXPOSE THIS COLOR MONITOR TO RAIN OR MOISTURE. NEVER OPERATE THE UNIT IF LIQUID HAS ACCIDENTALLY SPILLED INTO IT.** If this happens, have your set checked by a service technician before using it again. Otherwise, fire or electric shock could result.

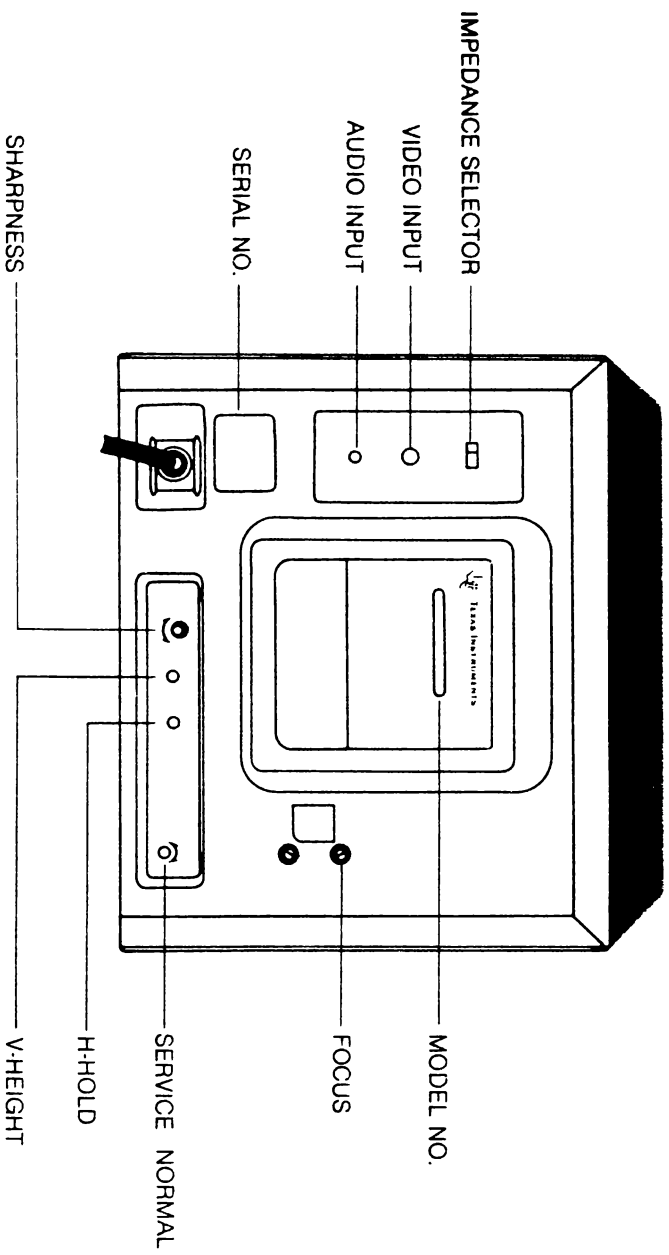
## **WHEN ON VACATION**

When you are going away on vacation, or do not plan to use your Color Monitor for a long time, we suggest you unplug it from the wall outlet.

# CONTROL PANEL



# BACK OF MONITOR

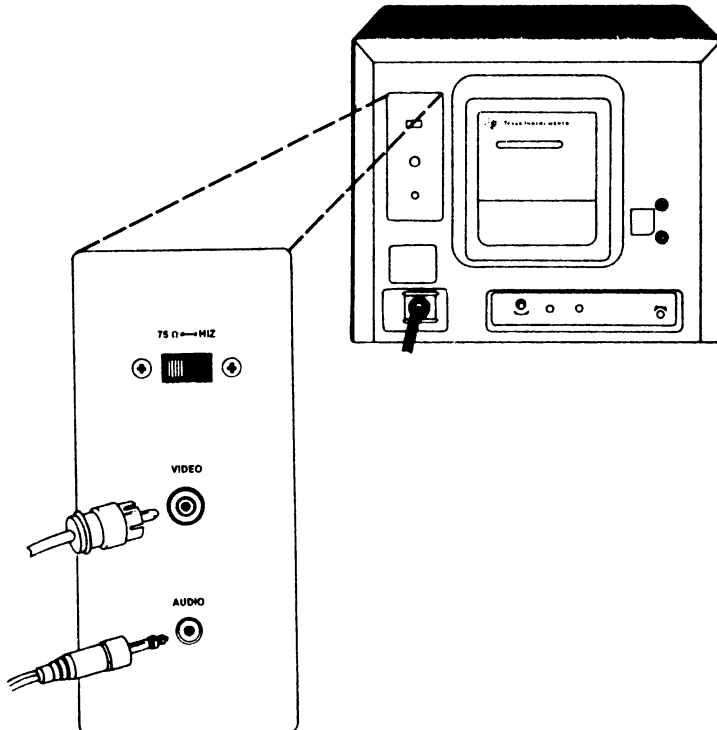


# CONNECTING YOUR PERSONAL COMPUTER

Two input sockets and an Impedance Selector switch are located on the back of the Color Monitor (see preceding illustration). To connect the monitor to your Personal Computer Console, use the cable provided with the monitor. Note that the cable can be connected in only one way: the 2-plug end attaches to the back of the monitor as shown here, and the multi-pin end connects to the console.

**Note:** When you connect the Color Monitor to the Personal Computer Console, check to be sure that the Impedance Selector switch is set to the 75-ohm position.

Now, turn the monitor ON. After the monitor warms up for a few seconds, switch the console ON.



# HOW TO GET A GOOD COLOR PICTURE

1. Turn your Color Monitor ON and allow it to warm up. Then turn the Personal Computer Console ON.
2. Turn the COLOR control all the way to the left to change the color picture to black-and-white.
3. Turn the CONTRAST control to the center of its range.
4. Now turn the BRIGHT control to the center of its range. This position usually assures that areas of the picture which should be black are black.
5. Now turn the COLOR control to the right to give the picture as much color as you want.
6. Turn the TINT control for the most pleasing colors.
7. Turn the CONTRAST control in either direction to get the brightness level you want.
8. **If the dark areas and colors appear faded or washed-out, turn the BRIGHT control to the left. If light backgrounds and colors appear too dark, turn it to the right.**
9. We recommend that you set the SHARPNESS control in the mid-range position. If you prefer a softer picture, turn the control to the left. For a sharper picture, turn it to the right.



# HELPFUL HINTS

Never attempt to operate the unit with the back cover removed. Never probe or push objects into the unit through the cabinet slots. If the cabinet has been damaged, do not operate the unit. Have it checked by a service technician before use.

## **PICTURE-GLASS CLEANING**

When you want to clean the face plate of the picture tube, first turn the monitor OFF. Wet a soft cloth in lukewarm water mixed with a little fabric softener or dishwashing detergent. Wring the cloth almost dry. Wipe the glass. Make sure that no drops of moisture are squeezed onto the glass. DON'T wipe the glass dry. Let it air-dry before you turn the unit back on.

## **CARE OF CABINET**

The cabinet should be cleaned with a soft cloth and a mild soap solution. Rinse it with clear water before wiping dry.

# INDIVIDUAL CONTROLS

## **ON/OFF VOLUME**

Turn the ON/OFF VOLUME switch to the right to turn your set ON. (To turn the set OFF, just turn the switch to the left.) This same control also adjusts volume. Turn the ON/OFF VOLUME control to the right to make the sound louder, and turn it to the left to make the sound softer.

## **COLOR**

This control sets the intensity of the colors. If the control is turned too far to the left, colors appear faded or weak. If the control is turned too far to the right, colors appear vivid or intense.

## **TINT**

Adjust this control for the most pleasing and realistic colors.

## **BRIGHT**

This control lets you adjust the black areas in the picture to the level you want. After the BRIGHT control is set, further brightness adjustments should be made with the CONTRAST control.

## **CONTRAST**

This control adjusts the color picture brightness for varying room-light conditions. It does this by adjusting contrast and color level at the same time and in the proper balance.

## **V-HOLD**

Adjust this control ONLY if the picture rolls either up or down.

## **SHARPNESS**

To get a softer picture, turn this control to the left. For sharper picture detail, turn the control to the right.

# MAINTENANCE AND SERVICE

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

- In the interconnecting cable.
- In the Color Monitor.
- In the Personal Computer Console.

The following tests can help you determine which component is at fault.

- Check to be sure the Impedance Selector switch on the back of the monitor is set at the 75-ohm position.
- Check to see if the monitor and the console are plugged into a working AC power source and turned on.
- If the problem involves only poor picture quality, adjust the controls as described in this manual.
- Be sure that the cable is properly plugged into both the monitor and console. 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.
- Check other remedies in the Maintenance and Service information section of the Personal Computer *User's Reference Guide*.
- If the suggested remedies are not successful, contact the Consumer Relations Department by mail or telephone. (Refer to "If You Have Questions or Need Assistance" later in this section.) Please describe in detail the symptoms of your Personal Computer Console and Color Monitor.

If you cannot determine whether the Personal Computer Console or the Color Monitor needs service, both units must be returned. **BE SURE TO INCLUDE THE INTERCONNECTING CABLE.** Consult the "Limited Warranty" section of this manual for terms and conditions of in-warranty repairs.

## **MAILING INSTRUCTIONS**

Service rates in effect at the time of return will be charged for out-of-warranty repairs. Please write or call for repair rate information as described in "If You Have Questions or Need Assistance."

For your protection, the Color Monitor should be sent insured. Texas Instruments cannot assume any responsibility for loss of or damage to the monitor during shipment. It is recommended that the Color Monitor be shipped in its original container to minimize the possibility of shipping damage. Otherwise, the monitor should be carefully packaged and adequately protected against shock and rough handling. Send to the appropriate Texas Instruments Service Facility listed with the warranty.

## **EXCHANGE CENTERS (LOCAL SERVICE OPTIONS)**

If your Color Monitor requires service, instead of returning the unit to your dealer or to a service facility for repair, you may elect to exchange the unit for a factory-reconditioned Color Monitor of the SAME MODEL (or equivalent model specified by TI) by going in person to one of the exchange centers which have been established across the United States.

A handling fee will be charged by the exchange center for in-warranty exchanges of the Color Monitor and the Personal Computer Console. Out-of-warranty exchanges will be charged at the rates in effect at the time of the exchange.

To determine if there is an exchange center in your locality, look for Texas Instruments Incorporated Exchange Center in the white pages of your telephone directory or look under the Calculator and Adding Machine heading in the yellow pages. Please call the exchange center for availability and exchange fee information. Write the Consumer Relations Department for further details and the location of the nearest exchange center.

## **IF YOU HAVE QUESTIONS OR NEED ASSISTANCE**

If you have questions concerning the Color Monitor,  
write to:

Consumer Relations  
Texas Instruments Incorporated  
P.O. Box 53  
Lubbock, Texas 79408

Or, call Consumer Relations at 800-858-4565 (toll free  
within the contiguous United States except Texas) or  
800-692-4279 (toll free within Texas). Calls of a  
technical nature may be made to 806-741-2663. Please  
note that collect calls cannot be accepted at this  
number.

# LIMITED WARRANTY

THIS TEXAS INSTRUMENTS COLOR MONITOR WARRANTY EXTENDS TO THE ORIGINAL CONSUMER PURCHASER OF THE PRODUCT.

## **WARRANTY DURATION**

All parts of this Color Monitor except the color picture tube are warranted from the date of the original purchase by the consumer for a period of three (3) months. The color picture tube is warranted for a period of two (2) years from the date of the original purchase by the consumer.

## **WARRANTY COVERAGE**

This Color Monitor is warranted against defective materials or workmanship. **THIS WARRANTY IS VOID IF THE MONITOR HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLIGENCE, IMPROPER SERVICE OR OTHER CAUSES NOT ARISING OUT OF DEFECTS IN MATERIALS OR WORKMANSHIP.**

## **WARRANTY DISCLAIMERS**

**ANY IMPLIED WARRANTIES ARISING OUT OF THIS SALE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ABOVE THREE-MONTH PERIOD. TEXAS INSTRUMENTS SHALL NOT BE LIABLE FOR LOSS OF USE OF THE COLOR MONITOR OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES INCURRED BY THE CONSUMER OR ANY OTHER USER.**

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you.

## **LEGAL REMEDIES**

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

## **WARRANTY PERFORMANCE**

Please first contact the retailer from whom you purchased the product and determine the exchange policies of the retailer.

During the above warranty periods, your Color Monitor will be repaired or replaced with a new or reconditioned monitor (at TI's option) when the product is returned either in person or by prepaid shipment to a Texas Instruments Service Facility listed on the next page. **TEXAS INSTRUMENTS STRONGLY RECOMMENDS THAT YOU INSURE THE MONITOR FOR VALUE PRIOR TO SHIPPING.**

The repaired or replacement monitor will be warranted for a period of three (3) months. The picture tube of the repaired or replacement monitor will continue the warranty of the original picture tube or will be warranted for three (3) months, whichever is longer. Other than the cost of shipment to TI, no charge will be made for the repair or replacement described in this LIMITED WARRANTY.

As an alternative to this Limited Warranty service, you may exchange your Monitor for a fee at one of the Exchange Centers established throughout the U.S. See "Exchange Centers" information in this manual.

## **TEXAS INSTRUMENTS CONSUMER SERVICE FACILITIES**

### *U.S. Customers:*

Texas Instruments Service Facility  
2303 N. University Avenue  
Lubbock, Texas 79415

### *Canadian Customers only:*

Geophysical Services Incorporated  
41 Shelley Road  
Richmond Hill, Ontario, Canada  
L4C5G4

Consumers in California and Oregon may contact the following Texas Instruments offices for additional assistance or information.

Texas Instruments Consumer Service  
831 South Douglas Street  
El Segundo, California 90245  
(213)973-1803

Texas Instruments Consumer Service  
6700 Southwest 105th  
Kristin Square, Suite 110  
Beaverton, Oregon 97005  
(503)643-6758

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