

Figure 6. 100° Tilt Bar Position

The tilt bar can be adjusted to one of the three positions by repeating the described adjustment procedures.

After you have satisfactorily adjusted the tilt bar, connect the VM-1's AC cord to a standard 120V AC outlet or an approved power strip such as Radio Shack's Automatic Power Controller (26-1429).

Connecting to a Computer

To connect the VM-1 to a computer:

1. Make sure that the power to all equipment is **OFF**.
2. Connect the 8-Pin **DIN** cable connector to the 8-Pin **DIN** I/O Connector located at the rear of the monitor. Connect the other end of the cable to the computer's I/O Connector.

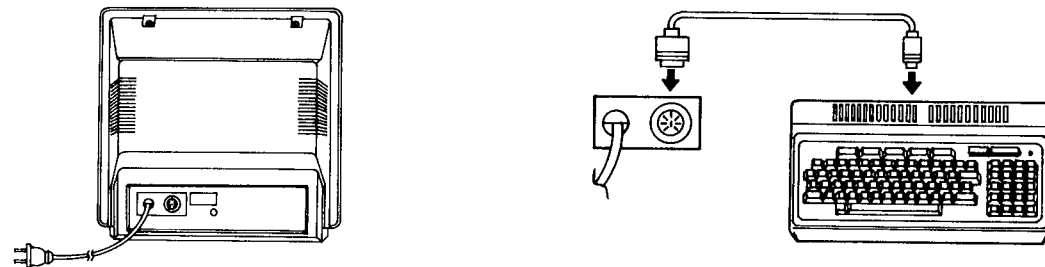
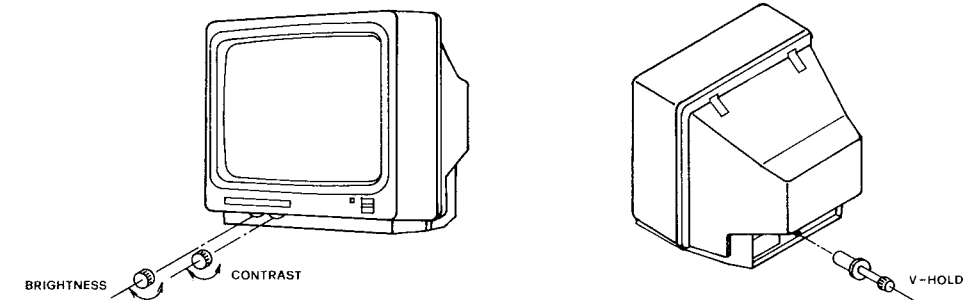


Figure 7. VM-1-TO COMPUTER CONNECTION

3/ Using the VM-1

Power-up all equipment. Use your system owner's manual for instructions on powering-up your computer and other peripherals. After power-up, you may need to adjust VM-1's picture to compensate for your lighting environment.

Picture Quality Adjustment



V-HOLD

This control stabilizes the display on the screen.

- Rotate the knob fully counter clockwise and then slowly clockwise to stabilize the display, if it happens to roll up and down vertically.

CONT and BRIGHT

Adjust the screen brightness to compensate for room lighting conditions.

- If the room is dark, rotate the control toward **LOW** until the picture is easily visible.
- If the room is bright, rotate the control toward **HIGH** until the picture is easily visible.

4/ Care and Maintenance

Unplug the set and have it checked by your qualified Radio Shack Service Technician:

- If the set has been dropped or the cabinet has been damaged.
- When the power cord is damaged or frayed.
- If the set has been exposed to rain or water.

If you are unable to restore normal operation by following the detailed procedure in your Operation Instructions, do not attempt any further adjustment. Improper adjustment of other controls may result in damage and often will require extensive work by a qualified technician to restore the set to normal operation. Unplug the set and call your Radio Shack Store or Radio Shack Computer Center.

If the set fails, or exhibits a distinct change in performance, unplug the set and have it checked by a professional Radio Shack Service Technician. It is normal for some sets to make occasional snapping and popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your Radio Shack Store or Radio Shack Computer Center.

Installation and Location Hints

The set has slots, openings in the cabinet and back for ventilation purposes, to provide reliable operation of the monitor, and to protect it from overheating.

- Install the set about 4-inches(0.1 meter) away from the wall.
- Never cover the slots or openings with cloth or other fabric.
- Never block the bottom ventilation slots of a set by placing it on a bed, sofa, rug, etc.
- Never place a set in a built-in enclosure, unless proper ventilation is provided.
- Never place the set near or over a radiator or heat register.

Never expose the set to rain or excessive moisture and dust as this can be a potential cause of fire or shock hazard.

Never place the set on an unstable monitor cart or stand. The monitor may fall causing damage or injury. Use only with sturdy cart or stand.

Operation

Operate the set only from the power source indicated on the cabinet.

Using a power source that is not marked on the monitor will shorten the life of the monitor, and cause damage in addition to improper operation. This monitor is equipped with a three-pin plug.

To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively grounded through the normal household wiring. Extension cords used with the equipment must be three-wire and be correctly wired to provide connection to ground. Wrongly wired extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is grounded and that the installation is completely safe. For your safety, if in any doubt about the effective grounding of the power point, consult a qualified electrician.

- Do not overload wall outlets and extension cords as this can result in fire or shock.

Adjust only those controls that are described in this instruction book. Improper adjustment of other controls may result in possible damage and will require the services of a technician to restore proper operation. Do not allow anything to rest on the power cord. Do not locate the monitor where the cord will be abused by persons walking on it.

2/ Setting up the VM-1

The VM-1 is very simple to set up. Prior to power-up, you need to adjust the tilt bar, connect the VM-1 to a compatible CPU, and you're ready.

Adjusting the Tilt Bar

Depending on your preference, you may want to adjust the tilt bar to a 90°, 95°, or 100° angle. The tilt bar is located on the underside of the VM-1 and consists of a plastic bar with a spring mechanism on the left, and a gear lock on the right.

When the bar is in its closed position, the VM-1 is viewed at a 90° angle.

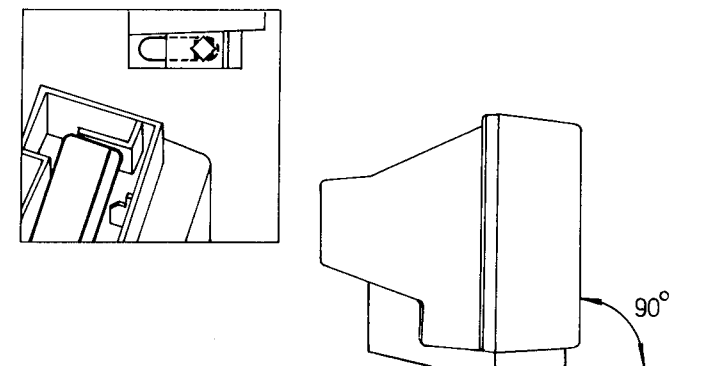


Figure 4. 90° Tilt Bar Position

To change the viewing angle, first lift the base of the VM-1 by tilting it backwards, being careful not to let it fall. Then, grasp the plastic bar and push it to the left so that the gear lock releases. With the bar in its unlocked position, slowly pull it toward you as far as it will go. Lock the tilt bar by gently releasing it to the right ensuring the ends of the bar locks fully. This is the 95° position.

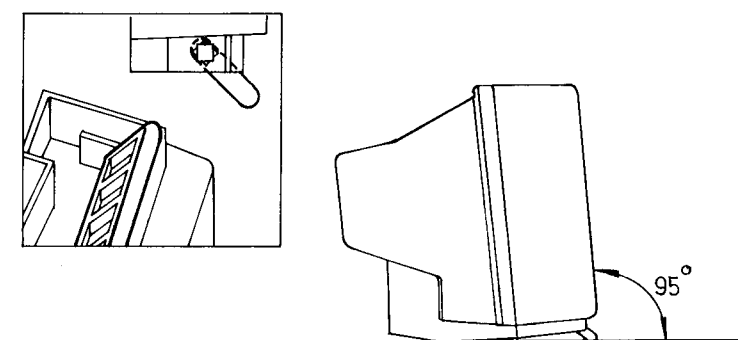


Figure 5. 95° Tilt Bar Position

To view the VM-1 at a 100° angle, again grasp the bar and push to the left. Then moves it backwards to a position where the bar is perpendicular to the base of the monitor. Lock the tilt bar by releasing it to the right.

1/ Description of the VM-1

Before doing anything else, be sure the following accessories are included in the package.

- VM-1.
- Monitor-to-Computer Cable.

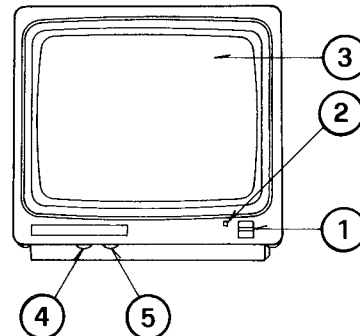


Figure 1. Front View

Front View

1. **POWER ON/OFF SWITCH.** Press to turn the VM-1's power **ON**. Press again to turn the power **OFF**.
2. **POWER ON INDICATOR.** This indicator illuminates when the VM-1's power switch is **ON**.
3. **GREEN PHOSPHOR HIGH RESOLUTION VIDEO SCREEN.**
4. **BRIGHTNESS CONTROL.** To adjust the picture brightness, use this control.
5. **CONTRAST CONTROL.** To improve contrast of the characters with characters with the screen, adjust this control.

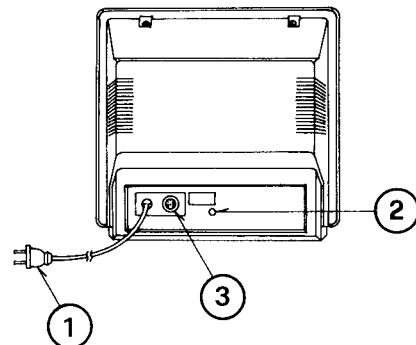


Figure 2. Rear View

Rear View

1. **POWER CORD.** Plug this power cord into an AC 120V electrical outlet.
2. **V-HOLD CONTROL.** If display "rolls" vertically, use this control to stabilize the picture.
3. **INPUT SIGNAL DIN SOCKET.** Plug the 8-Pin **DIN** cable plug into this connector. Connect the other end to a computer.

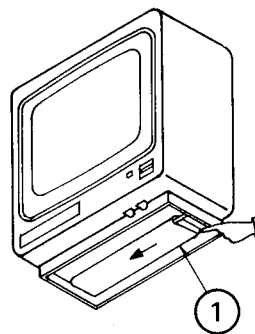


Figure 3. Bottom View

Bottom View

1. **3-WAY ADJUSTABLE TILTING BAR.** Adjust according to your viewing preference.

To extend the useful life of the monitor, always turn it **OFF** when not in use.

When not using the set for extended periods of time, such as a weekend or vacation, unplug the set from the wall outlet.

If the same characters or graphics are shown for a long time with the Brightness and Contrast control set to maximum positions, part of the screen may be damaged. Use these controls with care.

Do not remove the back cover of the set as this can expose you to very high voltage and other hazards.

- Caution children about dropping or pushing objects into the cabinet openings. Some internal parts carry hazardous voltages and contact can result in electrical shock or fire.
- Never operate the set near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
- Never spill liquids of any kind on the monitor. If a liquid has accidentally spilled into it, unplug the set and have it checked by a Radio Shack Service Technician before use.

Cleaning the VM-1

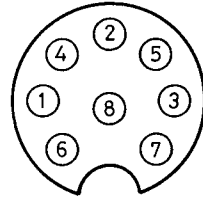
- Always unplug the monitor before cleaning.
- Wipe the screen, cabinet front and sides with a soft cloth.
- If the screen requires more than dusting, apply a household window cleaner to a soft cloth to clean the monitor screen.
- Do not use benzene, thinner, or any volatile substances to clean the unit as the finish may be permanently marred. Never leave the unit in contact with rubber or vinyl for an extended period.
- Occasionally, the internal parts of the monitor may need to be cleaned to prevent fire and other damage caused by dust particles. It is recommended that you take the unit to a Radio Shack Computer Center for yearly cleaning.

5/ Technical Information

Input Signal DIN Connector

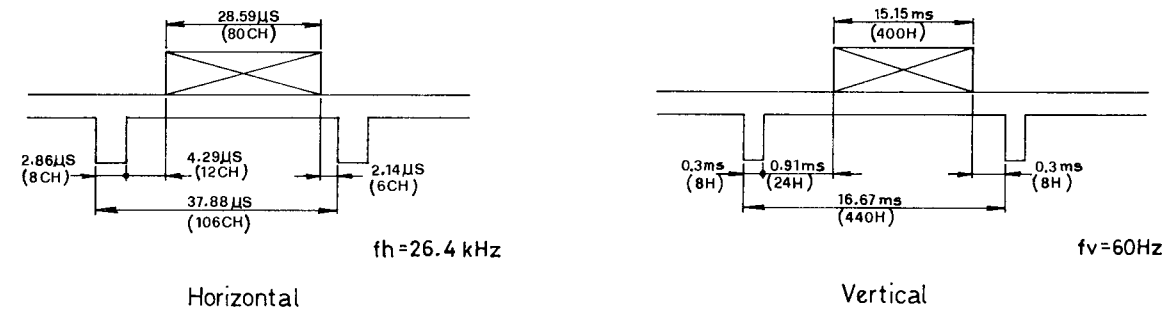
The input signal from a computer should be connected to the DIN connector through a shielded cable that has an 8-Pin DIN connector.

1. Not Connected
2. Ground
3. Intensity
4. Horizontal Drive
5. Vertical Drive
6. Not Connected
7. Video
8. Not Connected



Viewed from wire side

Input Signal



When an input signal other than that recommended is transmitted to the monitor as input, the following may occur:

Symptom	Causes
Shrunk screen	Data display period is too short.
Expanded screen	Data display period is too long.
Image to left or right	Data display period is out of alignment.
Moving screen	Synchronization period is different.
Dark screen	Front and back porch of video signal is missing.

Introduction

Congratulations on your purchase of the Tandy High Resolution Monitor VM-1. The VM-1 promises to be an enhancement to any compatible computer system.

The VM-1 features:

- 12-Inch Green Phosphor Screen which reduces eyestrain.
- Adjustable 3-position tilting mechanism for viewing comfort.

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2/ Setting up the VM-1	Pg 3
3/ Using the VM-1	Pg 5
4/ Care and Maintenance	Pg 6
5/ Technical Information	Pg 8
6/ Specifications	Pg 9

SERVICE POLICY

Radio Shack's nationwide network of service facilities provides quick, convenient, and reliable repair services for all of its computer products, in most instances. Warranty service will be performed in accordance with Radio Shack's Limited Warranty. Non-warranty service will be provided at reasonable parts and labor costs.

Because of the sensitivity of computer equipment, and the problems which can result from improper servicing, the following limitations also apply to the services offered by Radio Shack:

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2. If any Radio Shack computer equipment has been modified so that it is not within manufacturer's specifications, including, but not limited to, the installation of any non-Radio Shack parts, components, or replacement boards, then Radio Shack reserves the right to refuse to service the equipment, void any remaining warranty, remove and replace any non-Radio Shack part found in the equipment, and perform whatever modifications are necessary to return the equipment to original factory manufacturer's specifications.
3. The cost for the labor and parts required to return the Radio Shack computer equipment to original manufacturer's specifications will be charged to the customer in addition to the normal repair charge.

IMPORTANT INFORMATION

This equipment generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B 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 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:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technical for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: **How to Identify and Resolve Radio-TV Interference Problems**. This booklet is available from the United States Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

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.) that are 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.

6/ Specifications

Green Phosphor CRT	12" diagonal (304.8 mm) 90°
Active Display Area	8 3/8" x 6" (213mm x 152mm)
Display Characters	80 Characters x 25 Lines (Approximately 2000 characters)
Power Supply	AC 120V 15V 60Hz
Power Consumption	35W
Input Terminal	8-Pin DIN Socket
Input Signal	Video, intensity, vertical and horizontal sync.
Input Level	Video TTL positive, intensity TTL positive, vertical and horizontal sync. TTL negative
Input Impedance	Video 300 ohms, intensity 300 ohms, Sync. more than 1000 ohms
Scanning Frequency	Horizontal 26.4kHz, non-interlaced Vertical 60Hz
Blanking	Horizontal 9.3µsec. max. Vertical 0.9msec. max.
Resolution	800 dots x 400 lines (within active display area)
Controls	
Inside	H-Width, H-Hold, V-Linearity, V-Height, Focus, Sub-Brightness, Centering
Outside	Front (Contrast; Brightness) Rear (Vertical Hold)
Cabinet Dimensions	12 3/8" (W) x 11 3/8" (H) x 12 3/16" (D) (315mm (W) x 290mm (H) x 310mm (D))
Environmental Conditions	
Temperature	Operating 0° to +40°C (32°F to 104°F) Storage -40° to +71°C (-40°F to 160°F)
Humidity	Operating 20% to 80% Storage 5% to 90% (Not Condensed)
Weight	Approximately 15 lbs. 6ozs. (7.0kg)

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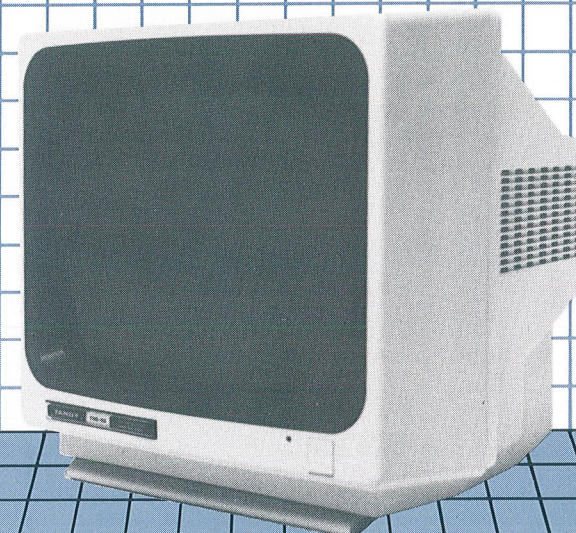
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TANDY®

VM-1

Operation Manual Catalog Number 26-5111



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