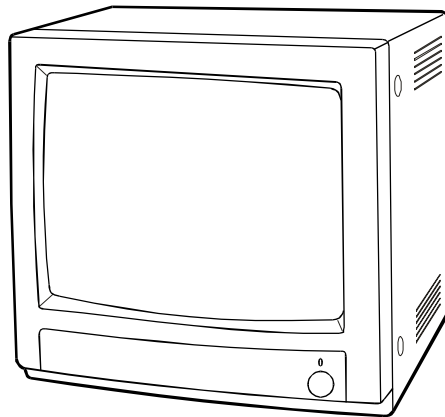


INSTRUCTION MANUAL

# BLACK&WHITE VIDEO MONITOR

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14-INCH

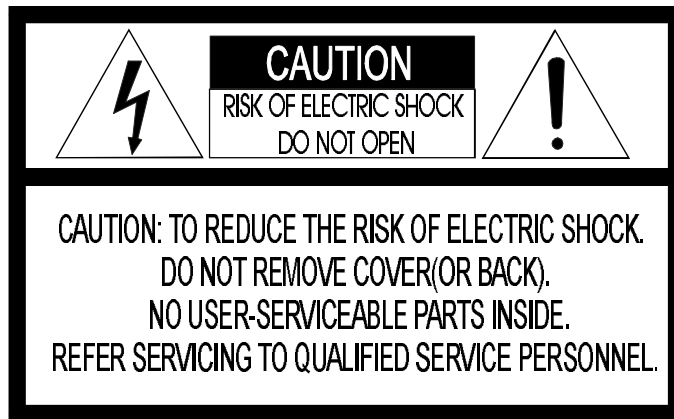


*Please read this manual thoroughly before use, and keep it handy for future reference.*

**WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.  
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

**CAUTION:**



**Explanation of Graphical Symbols**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**Precautions**

**Safety** -----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

**Installation** -----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.


The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

**Cleaning** -----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

# IMPORTANT SAFEGUARDS

1. **READ INSTRUCTIONS** -- All the safety and operating instructions should be read before the appliance is operated.
2. **RETAIN INSTRUCTIONS** -- The safety and operating instructions should be retained for future reference.
3. **CLEANING** -- Unplug video monitor or equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. **ATTACHMENTS** -- Do not use attachments not recommended by the video monitor or equipment manufacturer as they may result in the risk of fire, electric shock or injury to persons.
5. **WATER AND MOISTURE** -- Do not use video monitor or equipment near water -- for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, or the like.
6. **ACCESSORIES** -- Do not place video monitor or equipment on an unstable cart, stand or table. The video monitor or equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 6A. Videomonitororequipmentandcart combinationsshouldbemovedwith care. Quickstops, excessive force, andunevensurfacesmaycausethe equipment and cartcombinationto overturn. 
7. **VENTILATION** -- Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the video monitor or equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video monitor or equipment on a bed, sofa, rug, or other similar surface. Video monitor or equipment should never be placed near or over a radiator or heat register. Video monitor or equipment receiver should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
8. **POWER SOURCES** -- Video monitor or equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your video monitor or equipment dealer or local power company. For video monitor orequipment designedtooperatefrombattery power refer to theoperatinginstructions.
9. **GROUNDING OR POLARIZATION** -- This video monitor may be equipped with a polarized alternating - current line plug (a plughaving one blade widerthanthe other). This plug will fit into the power outlet only one way. This is a safety feature. If youareunabletoinserttheplugfullyintotheoutlet, try reversing the plug. If the plug should still fail to fit, contact your electricianto replace your obsolete outlet. Donotdefeat the safety purpose of the polarized plug.

Alternate Warnings - This video monitor is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
10. **POWER CORDS** -- Do not allow anything to rest on the power cord. Do not locate video monitor or equipment where the cord will be abused by persons walking on it.
11. **HEED WARNINGS** -- Follow all instructions marked on the videomonitororequipment.
12. **LIGHTNING** -- For added protection for video monitor or equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightningandpower-linesurges.
13. **OVERLOADING** --Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
14. **OBJECT AND LIQUID ENTRY** -- Never push objects of any kind into video monitor or equipment through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kindonthe product.
15. **SERVICING** -- Do not attempt to service video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. **DAMAGE REQUIRING SERVICE** --Unplug video monitor or equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power-supply cord or the plug has been damaged.
  - B. If liquid has spilled, or objects have fallen into the video product.
  - C. If the video product has been exposed to rain or water.
  - D. If the video product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
  - E. If the video product has been dropped, or the cabinet damaged.
  - F. When the video product exhibits a distinct change in performance -- this indicates a need for service.
17. **REPLACEMENT PARTS** -- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
18. **SAFETY CHECK** -- Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.
19. **FIELD INSTALLATION** -- This installation should be made by a qualified service person and should conform to all local codes.

## FCC COMPLIANCE STATEMENT

**INFORMATION TO THE USER :** THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS B DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE IN A RESIDENTIAL INSTALLATION. THIS EQUIPMENT GENERATES, USES AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. HOWEVER, THERE IS NO GUARANTEE THAT INTERFERENCE WILL NOT OCCUR IN A PARTICULAR INSTALLATION. IF THIS EQUIPMENT DOES CAUSE HARMFUL 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 OR RELOCATE THE RECEIVING ANTENNA
- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED
- CONSULT THE DEALER OR AN EXPERIENCED RADIO/TV TECHNICIAN FOR HELP

**CAUTION :** CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA.

## FEATURES

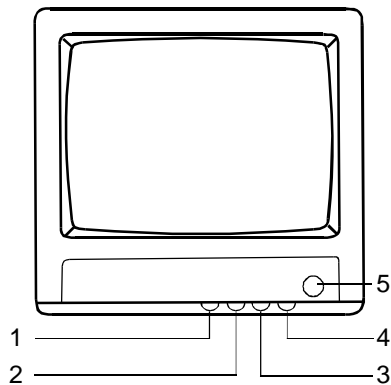
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- Rugged, attractively styled cabinet
- Crisp, high resolution picture
- Universal power (AC 100V to AC 240V) and detachable power cord
- 14" Standard rack mountable
- Auto termination BNC connector

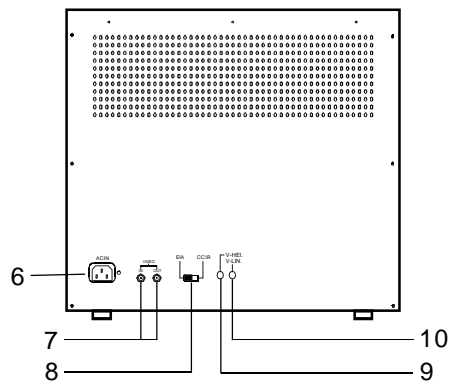
## OPERATING INSTRUCTION

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FRONT



BACK



**1. H-HOLD (Horizontal Hold) CONTROL**

When the picture has slanting horizontal bars, rotate the H-Hold control in either direction until a stationary picture is obtained.

**2. V-HOLD (Vertical Hold) CONTROL**

When the picture rolls up or down on the screen, adjust V-Hold control until there is a single steady picture.

**3. BRIGHT (Brightness) CONTROL**

Turn clockwise for more brightness and counterclockwise for less.

**4. CONTRAST CONTROL**

Turn clockwise to increase picture contrast and counterclockwise to decrease it.

## OPERATING INSTRUCTION, continued

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### 5. POWER SWITCH

To turn the monitor power on, press once and to turn the power off, press once again.

### 6. AC IN SOCKET

Connect the AC power cord (supplied) to this socket and to a wall outlet.

### 7. VIDEO IN/OUT CONNECTOR

Connect to the video output of a VCR or another monitor (for loop-through connection) or to a video camera.

Loop-through output of the video in connector. connector the video input of another monitor or a VCR

***Note :** The impedance is automatically set to 75 ohm by the input of a signal on the input connector while operating in a single connection mode. However, if a cable is connected to the output connector, the connection is placed into the open status by the multiple connection and high impedance automatically selected.*

***Caution :** Do not leave an unused cable connected to the monitor. If a single cable is used, then it must be connected to the input connector for the 75 ohm auto termination selector to function properly.*

### 8. SCAN MODE SELECTOR (EIA CCIR)

Set to EIA for EIA standard.

Set to CCIR for CCIR standard.

### 9. V-HEIGHT

This control is used to adjust the height of the monitor picture.

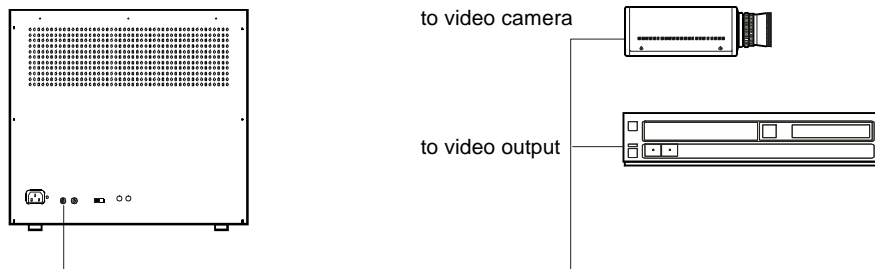
### 10. V-LIN. (Vertical Linearity) CONTROL

Adjust this control for the vertical linearity of the picture.

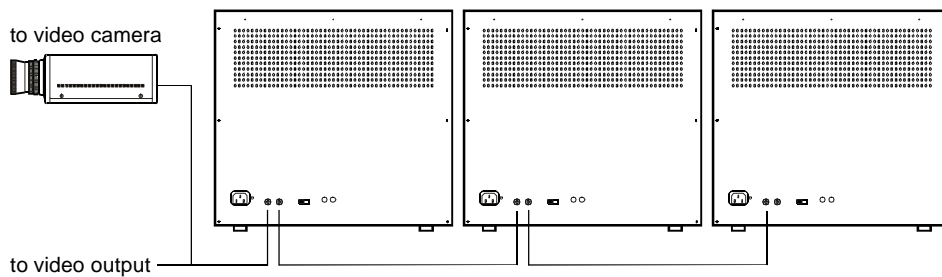
# CONNECTION

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## SINGLE CONNECTION



## MULTIPLE CONNECTION



Up to 3 monitor can be connected using the loop-through feature of this unit. When this monitor is connected to additional monitors, the same picture can be obtained on all the connected monitors.

### **WARNING**

*Do not leave unused cable or don't connect BNC connector to the last Jack of the monitor.*

## SPECIFICATIONS

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PICTURE TUBE	14" Diagonal, 20mm neck, 90° Deflection Angle (12.8" useful screen size)
POWER SOURCE	AC 90V - 132V 50/60Hz AC 198V - 254V 50/60Hz
POWER CONSUMPTION	20Watts
SCAN SYSTEM	EIA/CCIR Standard
RESOLUTION	more than 800 TV lines(center)
VIDEO IN/OUTPUT	EIA/CCIR Composite Video 1.0Vp-p(75ohm)
SCANNING FREQUENCY : HORIZONTAL	EIA : 15.734KHz CCIR : 15.625KHz
: VERTICAL	EIA : 59.94Hz CCIR : 50Hz
LINEARITY : HORIZONTAL	10%
: VERTICAL	10%
ACTIVE DISPLAY AREA	10% Overscanning
CONNECTOR : VIDEO	BNC connector x 2, Auto termination
OPERATING TEMPERATURE	0°C ~ 40°C(Performance Range)
AMBIENT HUMIDITY	10% ~ 90%
DIMENSIONS(W x D x H)	328mm x 320mm x 315mm
WEIGHT	4.3Kg

## BLACK & WHITE VIDEO MONITOR

14-INCH

50301410A