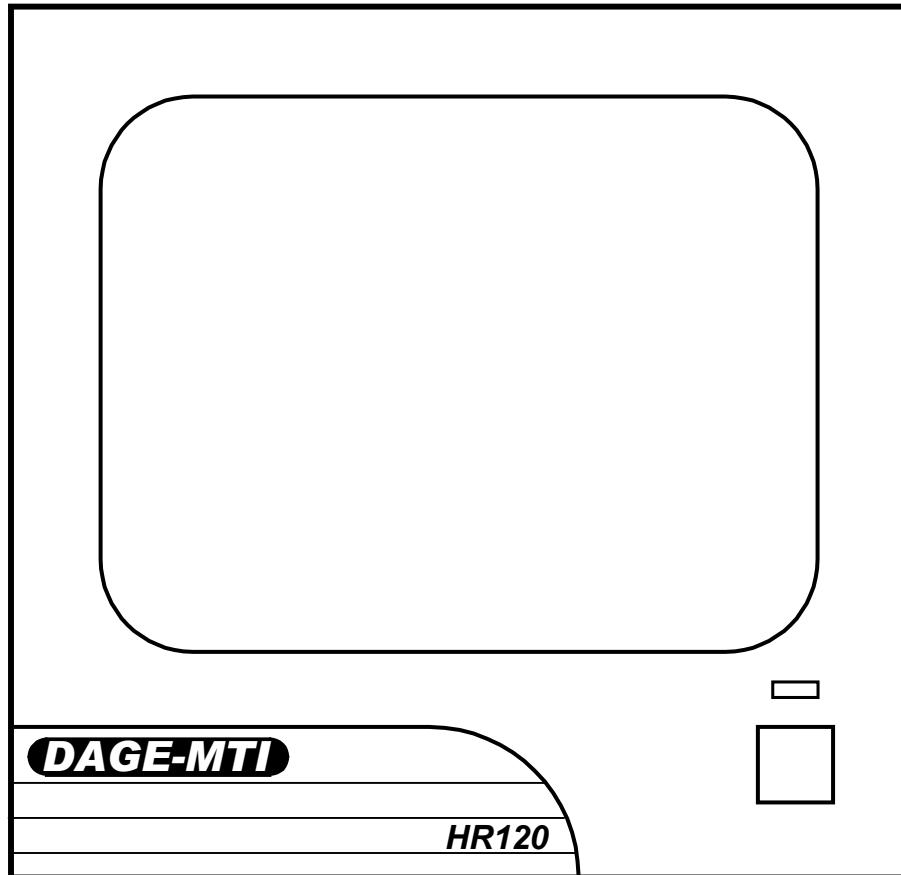


User's Manual



DAGE-MTI

HR120

Monochrome Monitor

Purchaser's Record

Model Name: *DAGE-MTI HR120*

Serial Number:

Dealer's Name:

Dealer's Address:

Dealer's Phone Number:

Date Purchased:

P.O. Number:

Introduction

The **DAGE-MTI HR120** monochrome monitor provides a cost-effective method for viewing video images in almost any environment. The rugged construction of these monitors allows them to be used in a variety of situations. The wide range of contrast and brightness ensures that a clean, crisp image will be available for those difficult images. The front panel allows access to all of the critical controls needed

DAGE-MTI offers our customers state-of-the-art video technology... with an eye on your image.

Installation

The HR120 is equipped with rubber feet and may be installed on any horizontal surface such as a desk, bench, or table. Connection of the monitor to the video source is with BNC coax cables and is dependent upon whether the video signal will terminate at the monitor or continue to another place. The rear panel **IMPEDANCE** switch allows the input video to either be terminated in 75Ω or left in a high impedance state for looping to another location. **Always ensure that the video signal is eventually terminated into 75Ω .**

Do not install this monitor in an excessively hot location, or in any way obstruct the ventilation holes located on the bottom and rear of the cabinet.

With the exception of the picture tube, the monitor incorporates all solid state circuitry. General maintenance therefore will not be required. However, for optimum picture clarity, it is recommended that the viewing screen be periodically wiped clean with a damp cloth.

Front Panel Operation

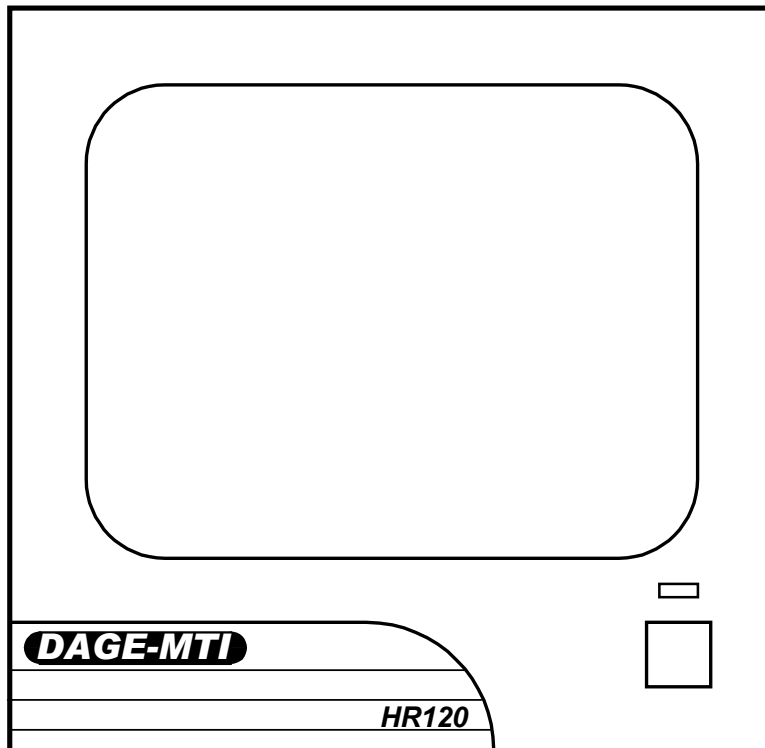


Figure 1: HR120 Front Panel

Power Switch

This push-button switch turns the monitor on and off. To turn the monitor on, push the switch button. The green LED above the switch lights to indicate that the monitor is on.

Horizontal Hold

This control allows adjustment of horizontal stability. In the event of picture “tearing” to the left or right, adjust the **HORIZONTAL HOLD** control until the picture stabilizes.

Vertical Hold

This control permits the adjustment of vertical stability. If the monitor picture is “rolling” up or down, adjust the **VERTICAL HOLD** control for a stable picture.

Brightness

This control adjusts the overall brightness of the picture. Adjust the **BRIGHTNESS** control for optimum darkness in the blackest portion of the picture.

Contrast

This control adjusts the contrast or difference between the black and white portions of the picture. Adjust the **CONTRAST** and **BRIGHTNESS** controls for optimum darkness in the blackest portion of the picture and optimum brightness in the whitest portion of the picture without “blooming” or over saturation of the whites.

Rear Panel Operation

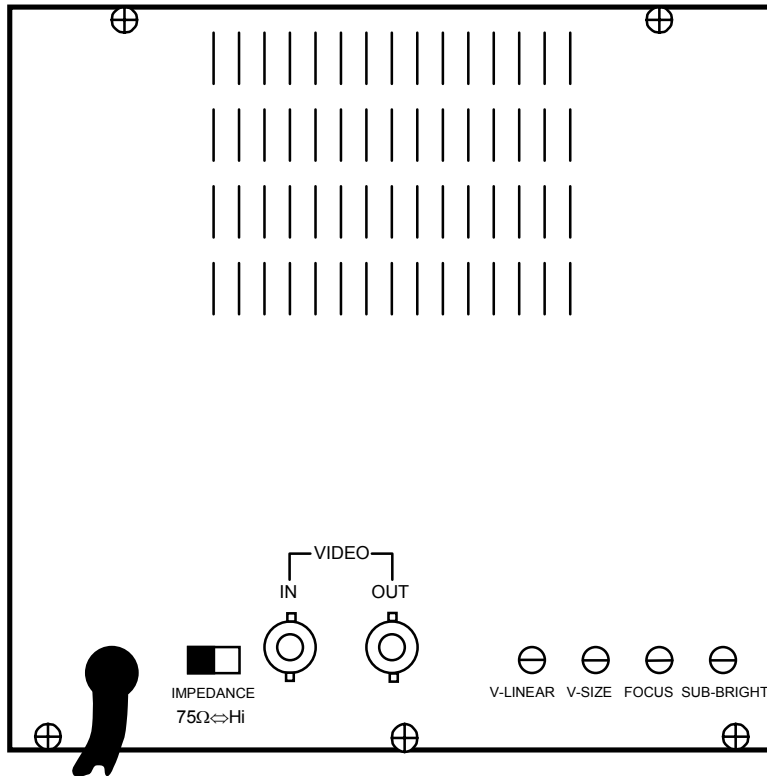


Figure 2: HR120 Rear Panel

Power

The AC input power cord accepts voltages in the range of 108 to 132VAC, 60Hz. If the monitor is going to be used with 220VAC, an auto transformer ***must*** be used in order to step down the 220VAC supply to 120VAC.

Warning: To prevent the risk of electric shock, do not remove the cover or back. Refer all servicing to qualified personnel.

Video In/Out

These BNC connectors permit “loop-through” connection of a video signal in installations where it is desirable to display the video signal on more than one monitor, or send the signal to other equipment in addition to the monitor. A standard 1Vpp video signal that is applied to the **VIDEO IN** BNC also appears at the **VIDEO OUT** BNC.

The **IMPEDANCE** switch provides convenient selection of a 75Ω termination when the video signal only goes to the monitor, or when the monitor is the last video component attached to the video line. When the video signal is looping through the monitor, the switch must be set in the **HI** position and the last video component must be terminated into 75Ω .

The following four controls are factory set and should not require further adjustment. If a problem occurs, refer adjustment to a qualified service technician.

V-Linear

This adjustment controls the monitor's vertical linearity. The linearity of the monitor allows for equal scanning of the monitor from top to bottom. Misalignment of the vertical linearity results in circles becoming oblong or elliptical.

V-Size

As the name suggests, this controls the vertical size of the monitor's picture. The control should be set to allow the total image to reside in the viewing portion of the screen.

Focus

The focus controls the sharpness of the picture. The control should be set for maximum sharpness of the image.

Sub-Bright

This control works along with the front panel's **BRIGHTNESS** control to provide the correct brightness of the output picture. The control should be set to provide the correct range to the front panel's **BRIGHTNESS** control.

Specifications:

Viewing Area:	93.5 in ²
Resolution:	>800 TVL
Scan Rate:	RS-170 & CCIR
Input Signal:	Composite 1V _{pp} into 75Ω term.
Input/Output Connector:	BNC
Input Voltage:	108VAC to 132VAC
Input Power:	19 Watts
Operating Temp:	0°C to +40°C
Dimensions:	
Height:	12½"
Width:	12"
Depth:	12"
Weight:	19.9 lbs.
Approvals:	CE, CSA, UL

Features:

- D.C. Restoration
- Wide range contrast and brightness controls
- Rugged attractively styled steel cabinet
- Convenient up-front controls
- Crisp high resolution image
- High contrast picture tube
- Built-in carrying handle

Troubleshooting

No Picture (Check or try the following)

1. Monitor Power On?

- a. Power cord attached to live AC source?
- b. Power switch on?
- c. Power LED on monitor front on?

2. Correct Signal to Monitor?

- a. Camera or video source connected correctly?
- b. Camera or video source power on?
- c. Video signal correct format (NTSC or CCIR)?
- d. Camera lens open?
- e. Light level to camera too low?
- f. Camera set-up correctly (AGC, Shutter, Etc.)?

Warranty

The ***DAGE-MTI HR120*** is warranted to be free of defects in material and workmanship in normal use for a period of one year from the original date of purchase from ***DAGE-MTI***.

This warranty does not apply to units which have been subject to abuse, neglect, accident, improper installation, or on which the serial number has been removed or damaged. Units that have been altered without the prior permission of ***DAGE-MTI*** are not covered by this warranty.

This warranty does not apply to other equipment furnished by ***DAGE-MTI***, which is listed or otherwise identified as manufactured by another and therefore shall be covered by the other manufactures' applicable warranty.

Limitations

1. This warranty is valid only if the malfunctioning unit is returned to *DAGE-MTI* service depot, This warranty does not cover on-location service. If warranty work is needed, the following should be contacted:

DAGE-MTI, INC.

Customer Service

701 N. Roeske Ave.

Michigan City, IN 46360

(219) 872-5514

Fax: (219) 872-5559

service@dagemti.com

2. This warranty does not cover:
 - a. Problems caused by or inflicted upon associated equipment such as digitizing systems, video tape recorders, cameras, microscopes, etc.
 - b. Damage caused by accident, misuse, improper power source, fire, flood, lightning, other acts of God, war, and repair or alteration by other than a *DAGE-MTI* authorized service organization.
 - c. Labor or incurred charges required in removing or installing the Product, down time, failure of the Product to perform properly, and any consequential damages.
 - d. Transit damage.
3. Unit must be properly packaged (in original packing, if possible) when being returned under warranty.

DAGE-MTI Inc.

701 N. Roeske Ave.

Michigan City, IN 46360

(219) 872-5514

Fax: (219) 872-5559

E-mail: dage@dagemti.com

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