

Aumax-VGA

user manual

Aumed
Seeing is Believing

Aumax-VGA

User Manual English

**Version 2.0
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Aumed

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Aumax-VGA User Manual

Aumed Group Corp (Aumed), China largest company in low vision industry, an ISO 13485/9001 certified company has been in the forefront of design, development & manufacture of Video Magnifier (for low vision) and Ophthalmology Equipments.

With over 80 employees, including 30 more experienced engineers, whose average age is 26, Aumed is a technology powerhouse of youthful spirit. Every year, Aumed invests more than 20% of the total revenue to its R&D section. Its R&D team is the largest in the Low Vision area of the world, which includes electronic design team, optical design team, mechanical design team, process design team and testing team.

Aumed has excellent reputation in the video magnifier (for low vision) and ophthalmic equipments market on China's Mainland. Our customers include China Disabled Person's Federation – representative of China Government for the welfares of disabled persons, more than 3400 schools, China's largest chain for utensil of disable person and more than 763 hospitals.

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1. Introduction

Congratulations on choosing the Aumax-VGA, an easily transportable auto-focus video magnification system from Aumed. Use the Aumax-VGA for reading, writing, viewing photographs, doing crafts and lots more.

The Aumax-VGA enables you to view printed text, images and objects up to 76 times (on 19" wide screen LCD) magnification in different colours. With its ergonomic control pad and flexible camera arm the Aumax-VGA extends in operating and reading comfort. The Aumax-VGA can be used at home or in school and office settings.

If you have any questions or suggestions concerning the use of this product, please contact your distributor or the Aumed headquarters using the contact information found at the end of this user manual. Your feedback is greatly appreciated. We hope you enjoy working with your Aumax-VGA.

About this manual

This user manual provides a comprehensive guide to the features and operation of the Aumax-VGA video magnifier. Pictures in this user manual may be different from the actual situation. Aumed preserves all the rights for the interpretation of all contents in this user manual. Please read this user manual carefully before using the Aumax-VGA and keep the user manual in a safe place for future reference.

2. Safety and care

- Only use the Aumax-VGA indoors.
- Do not expose the Aumax-VGA to extreme or rapid changes in temperature or humidity. Do not place Aumax-VGA near a radiator or heater, or where it will be exposed to direct sunlight. These conditions may damage electronics or optics of the Aumax-VGA.
- Do not use the Aumax-VGA near other electric appliances or inadequately shielded medical devices. It may cause an electromagnetic interference.
- Do not place this system on an unstable surface. It may fall, causing serious damage to the unit or injuries to the user.
- Handle the Aumax-VGA with care. Rough handling will damage the internal components.
- If moving the Aumax-VGA to another location, disconnect the power cord and other cables from external connectors.
- The camera arm contain moving and removable mechanical parts. Please remind your safety while removing or adjusting the mechanical parts. (Users are recommended not to remove the mechanical parts frequently.) Injury may occur if fingers or loose items of clothing are caught in the operating mechanisms. If you have difficulty in operating the unit safely, please seek advice or contact your local Aumed distributor.
- Do not remove any parts of the Aumax-VGA. Contact your local Aumed distributor to service the Aumax-VGA if necessary. Do not open any of the components as this will void the warranty. Each component contains parts which should only be serviced by an Aumed repair specialist.
- Always turn the power off when the system is not in use.
- Always unplug the system before cleaning. Use a soft damp cloth to clean the exterior. Do not use cleaning agents or abrasive materials as they will damage your unit. Avoid touching the lens of the camera and keep it clean by using proper cleaning means.
- Use only the power adapter provided.
- Do not use the unit under +5° or above +40° Celsius.

Use of the Aumax-VGA other than that described in this user manual will exclude it from warranty conditions.

3. What's in the box?

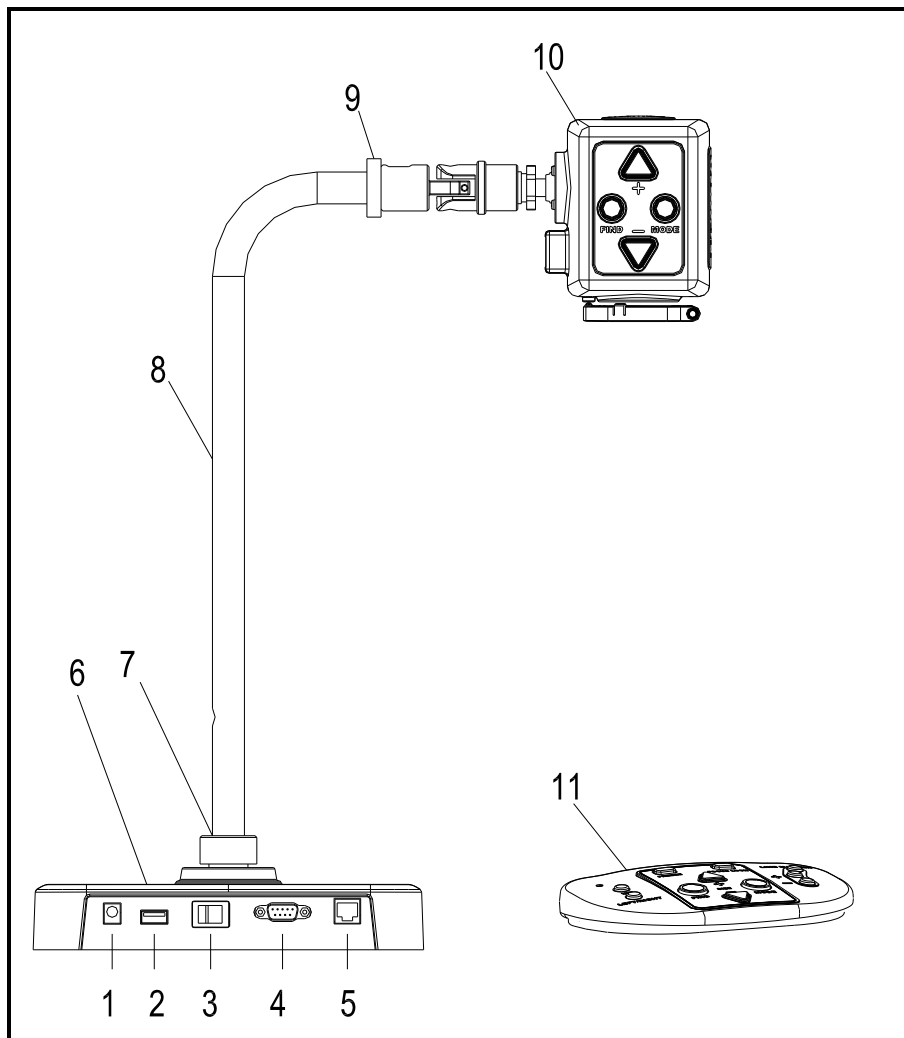
The Aumax-VGA packaging contains the following:

- The Aumax-VGA video magnifier
- A detachable camera unit
- A control pad
- A power supply adapter
- This user manual
- Optionally a carrying case

If any items are missing from your package, please contact your local Aumed distributor.

4. Getting to know your Aumax-VGA

The following figure shows the main components of the Aumax-VGA.



- | | |
|------------------------------|-----------------|
| 1. Adapter Socket | 7. Axes |
| 2. Control Pad USB Connector | 8. Long Arm |
| 3. Power Switch | 9. Screw Nut |
| 4. VGA Out | 10. Camera |
| 5. Camera Data Socket | 11. Control Pad |
| 6. Base | |

Setting up the Aumax-VGA

To set up the Aumax-VGA please follow the steps described below:

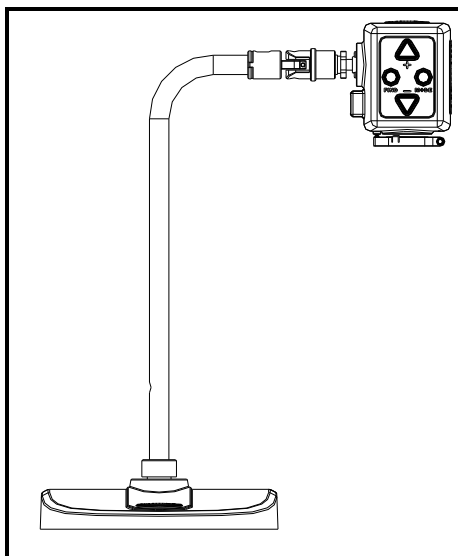
- Install the long arm:
 - Install the long arm to the axes by fastening the screw at the connection point.
- Install the camera head:
 - Install the camera head to the camera arm by fastening the screw at the camera connection point.
 - Connect the data cable to the data cable connector located at the rear of the camera head.
- Connect the control pad to the USB socket at the left side of the base stand.
- Connect the power supply adapter to the adapter socket at the left side of the base stand.
- Plug the other side of the adapter to the power outlet.

Choosing between left- or right-hand usage

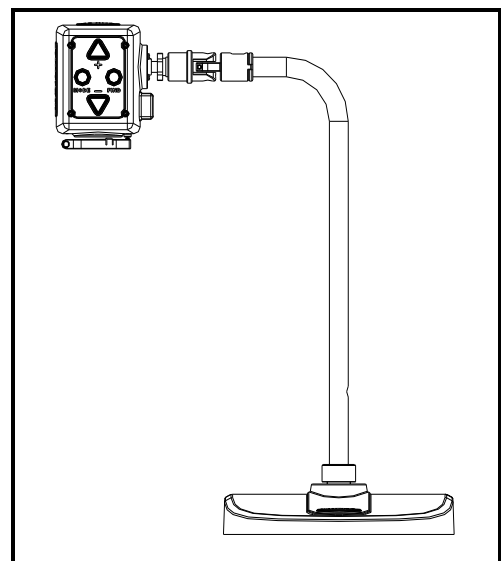
The Aumax-VGA is designed for both left and right hand users. To set the unit according to left or right hand use position the camera head as described in the next paragraph and rotate the Aumax-VGA image if necessary by pressing the left / right hand use button.

Positioning the camera head and the camera arm

The Aumax-VGA features a flexible camera head and camera arm. The camera head can be rotated in front of the screen 180 degrees around a vertical axis to fit both to left- and right hand use. The following figure shows the camera head at the position for right and left hand use.

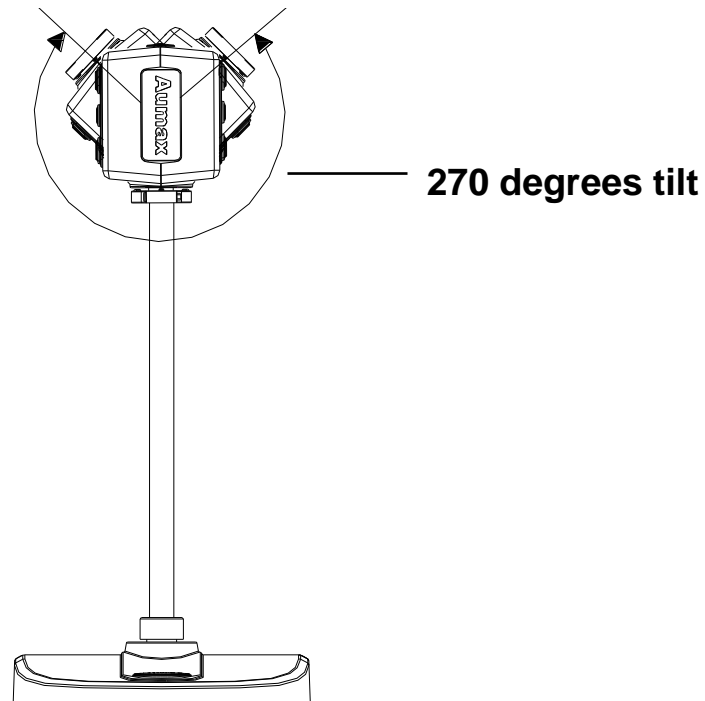


Camera position for right-hand use



Camera position for left-hand use

Around a horizontal axis the camera head can be tilted 270 degrees. Tilt the camera head and rotate it to view objects such as a white board at a more distant proximity. The following figure shows the possible tilt movements.

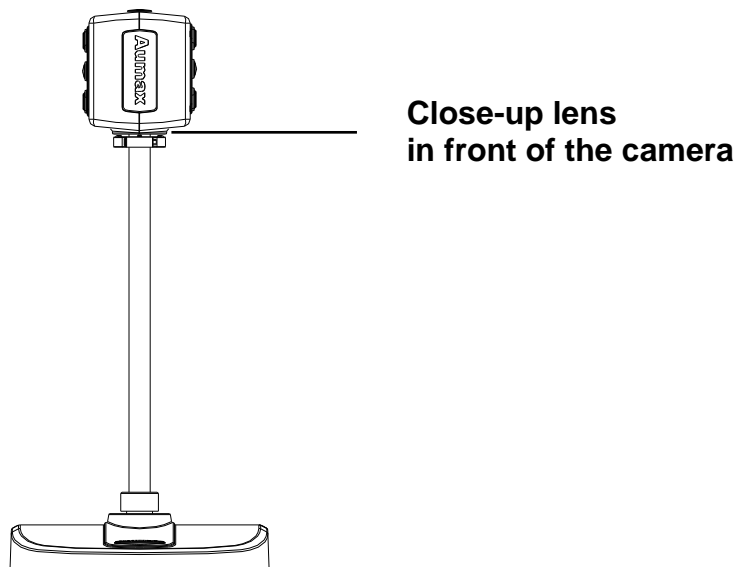


Camera positions

The Aumax-VGA automatically re-adjusts to its original settings when the camera is turned from near to distance viewing and back. For example when you tilt the camera quickly from a whiteboard to your desktop, your preferred viewing mode and magnification settings will automatically be applied. Three sets of settings can be stored: close-up viewing, self-viewing and distance viewing.

Close-up viewing

To view objects located on the table surface or to write, focus the camera head towards the desktop and position the close-up lens in front of the camera. The recommended distance for close-up viewing is between 30 – 40 cm.



Self-viewing

To view yourself and to use the Aumax-VGA as a mirror focus the camera towards you and position the close-up lens away from the camera. The recommended distance for self-viewing is 40 – 50 cm.

Distance viewing

To view objects at a more distant proximity between, 1-5 meters focus the camera head towards the object and position the close-up lens away from the camera. The distance viewing can be used to read text for instance from a whiteboard.

5. Getting started

Before starting operating with the Aumax-VGA the camera head needs to be installed.

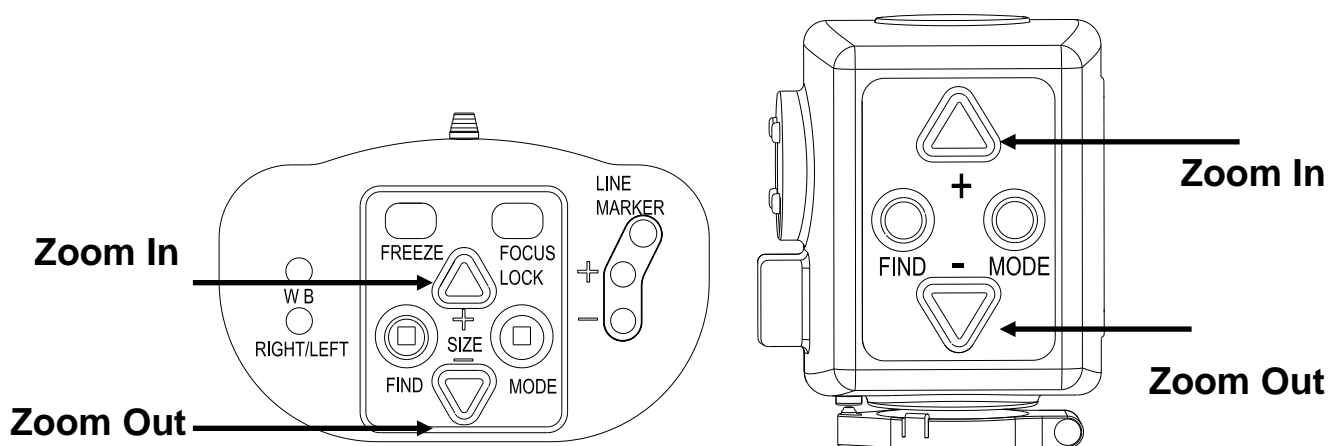
Switching On / Off

Press the On / Off switch located at the right side of the base unit to power the Aumax-VGA.

Setting the magnification

Press the “+” and “-” button at the centre of the control pad or on the camera head to adjust the magnification. Press the “+” button to increase and similarly the “-” button to decrease the magnification. Press and hold the buttons for more than 1 second to adjust the magnification continually. The Aumax-VGA magnifies text and object placed on the desktop at least 30 cm

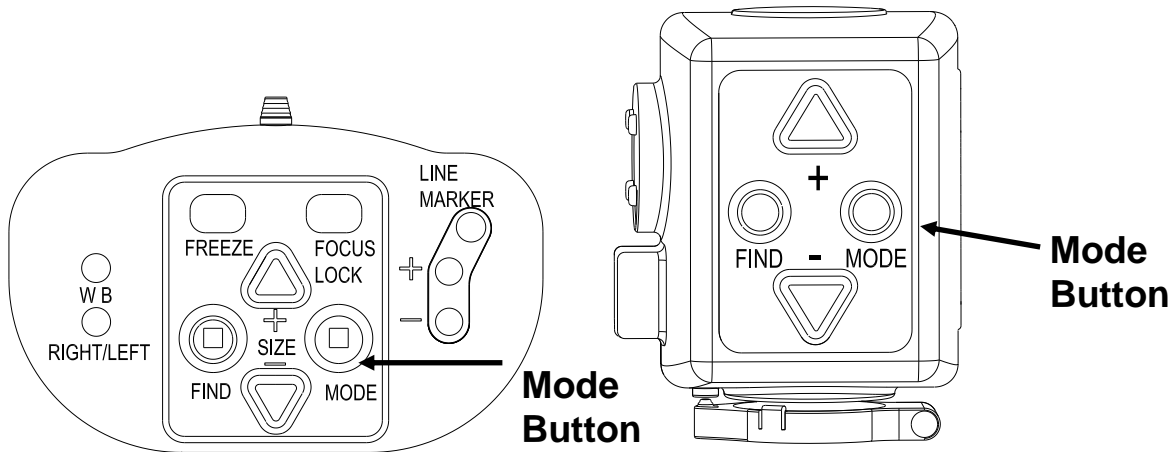
away from the camera from 2 to 76 times (on 19" wide screen LCD) the original size.



Viewing modes

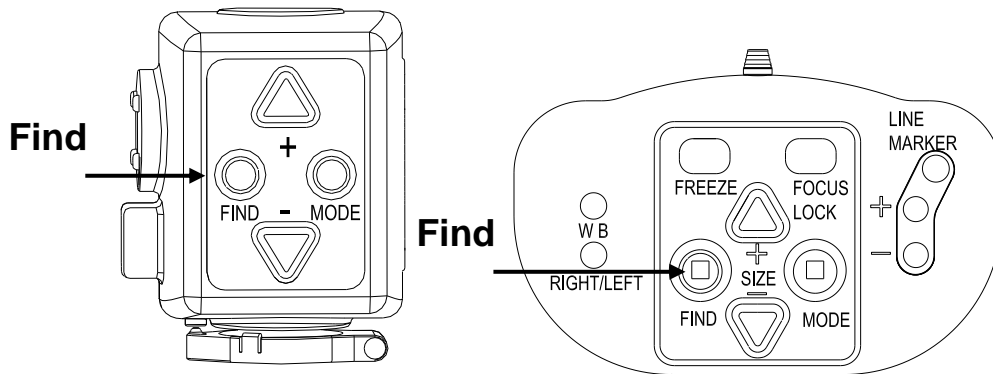
Pressing this button on the control pad or on the camera head will cycle you through 8 different viewing modes:

- **Full Color Photo Mode**
This mode will display text, pictures and objects in full colour.
- **Gray Mode**
This mode enhances the foreground / background contrast.
- **Positive Reading Mode (High contrast black on white)**
This mode enhances the foreground / background contrast. Pictures and text will be displayed as black text on a white background.
- **Negative Reading Mode (High contrast white on black)**
This mode reverses the positive image. Pictures and text will be displayed as white text on a black background.
- **High contrast white on blue**
This mode displays white text on a blue background.
- **High contrast yellow on black**
This mode displays yellow text on a black background.
- **High contrast yellow on blue**
This mode displays yellow text on a blue background.
- **High contrast green on white**
This mode displays green text on a white background.



Find function

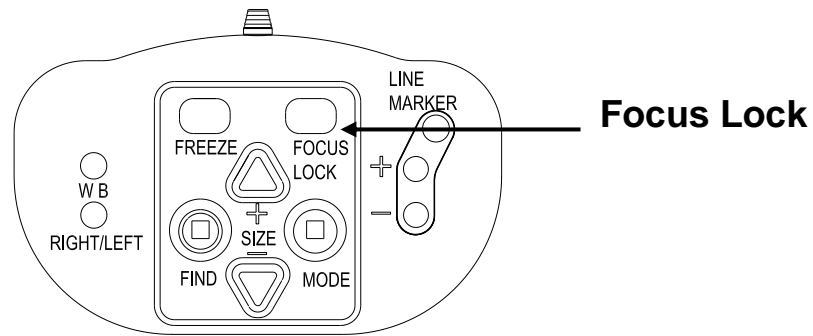
The find function is a useful tool that helps you to scroll through a text quickly by providing an overview of the document that you are reading. Press and hold this button on the control pad or on the camera head to activate the find function. When the find function is activated the Aumax-VGA will automatically zoom out to the minimum magnification and will display a green sign indicating the centre of the screen. Move the camera to position the text you wish to read to the centre of the screen. After positioning the text release the button. The Aumax-VGA will automatically zoom in on the selected text and return to your previous magnification setting.



Focus lock

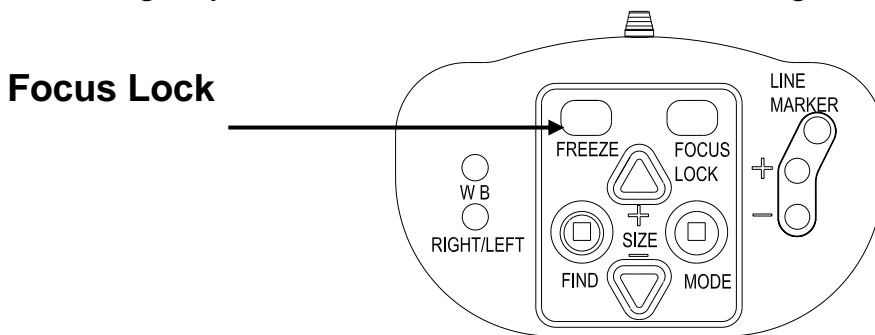
The Aumax-VGA features an automatic focusing system to produce a sharp onscreen image any time. When switching the Aumax-VGA on, the system will start up in the auto-focus mode.

Press this button on the control pad to switch to Focus Lock which stops the Aumax-VGA from continuously focusing. This is useful for tasks such as writing, painting or enjoying craftwork. Pressing this button will re-activate the auto-focus and the text “Focus lock” will disappear.



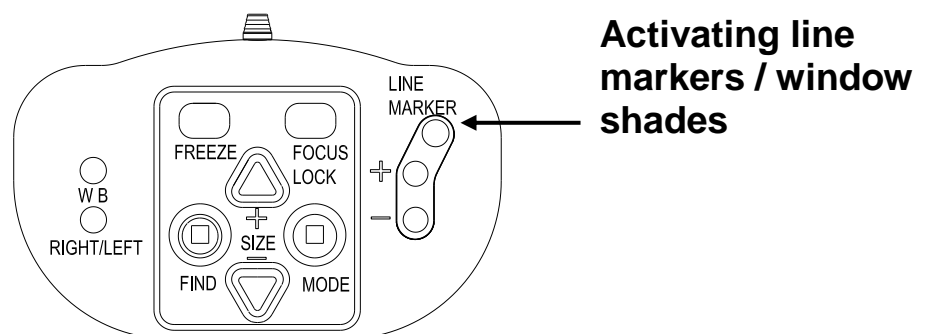
Using the Freeze button

The snapshot button allows you to take a temporary picture of a text or an image. Press the Freeze button on the control pad to freeze the image. Pressing any other button will unfreeze the image.



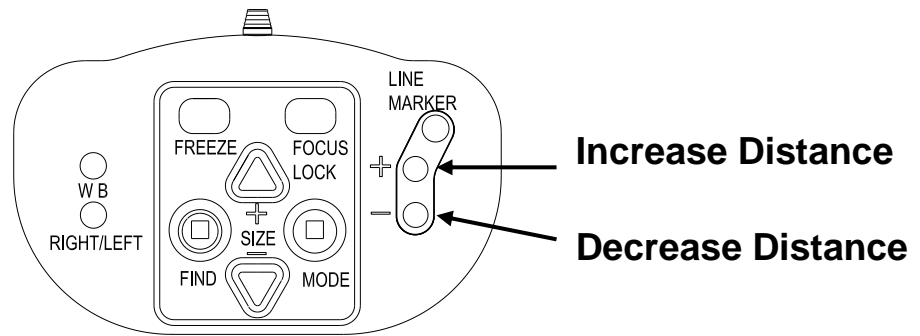
Activating line markers / window shades

Pressing this button on the control pad cycles you through horizontal line markers, horizontal window shades and full screen camera image. Line markers are used as guides making the text to read easier. The window function can be used to block part of the image when the screen brightness causes inconvenience.



Positioning of lines / windows

When horizontal line markers or the windows are activated, pressing these buttons will change the distance between the line markers / window shades on the screen. To increase the distance press the "+" button and to decrease the distance press the "-" button.



White Balance

The White Balance function refers to the adjustment that balances the colours of a picture in Photo mode. Pressing this button on the control pad will cycle you through 3 White Balance modes:

- **Automatic White Balance Mode**

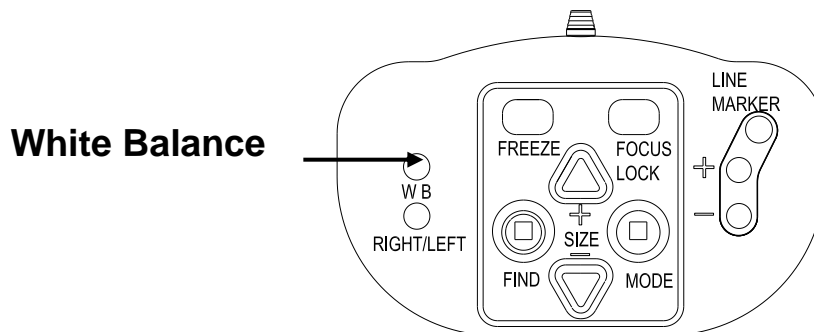
This mode will display a picture as the original appearance. It is recommended to use the Automatic White Balance mode.

- **Warm Colour Mode**

This mode will enhance the warm colours of a picture such as red in a picture.

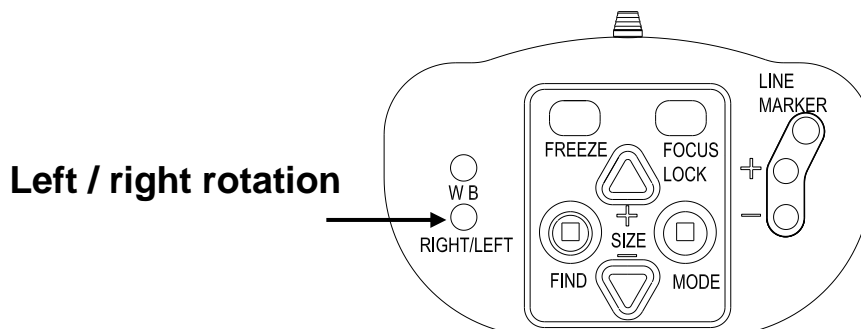
- **Cool Colour Mode**

This mode will enhance the cool colours such as blue in a picture.



Left / right rotation

When positioning the camera according to the hand orientation from the left to the right side or the other way around the camera image will be displayed upside down. Simply press this button to adjust the camera image to the right position.



6. Contact / product support

If you have questions about the operation, installation or setting of your system, please contact your Aumax-VGA distributor or closest Aumed office. See a complete list of Aumed addresses at the end of this user manual.

Your Aumax-VGA distributor:



7. Warranty conditions

Aumed warrants the Aumax-VGA, effective from the date of delivery, to be free of any defects in material and workmanship.

Warranty is not transferable and does not apply to groups, multi users or agencies. The Aumax-VGA has been designed for the individual purchaser to be used in home and office environments. Aumed reserves the right to repair or replace any purchased Aumax-VGA with a similar or better product.

In no event shall Aumed or its distributors be liable for indirect or consequential damages. This warranty is valid only when serviced in the country of original purchase and with intact seals. For additional warranty claims or service during or after warranty period, please refer to your distributor.

Aumed takes no responsibility for use of this device other than described in this manual.

8. Compliances

This product complies with the safety and EMC requirements of the directives:

EMC:

EN 55022

EN 55024

FCC

FCC part 15 Class B

WARNING: The use of accessories, transducers and cables other than those specified and sold by the manufacturer of the Aumax-VGA as replacement parts for components, may result in increased emissions or decreased immunity of the Aumax-VGA.



This device bears the CE, FCC and approval mark.

9. Specifications of the Aumax-VGA

Focus	: Auto-focus with focus lock
Magnification	: 2 X – 76 X (on 19" wide screen LCD)
Dimensions	: 38 x 22 x 46 cm
Weight	: Approx. 2.85 kgf with carrying case
Viewing modes	: Full Color photo mode Gray mode High contrast black on white High contrast white on black High contrast white on blue High contrast yellow on black High contrast yellow on blue High contrast green on white
Power adapter	: Input 110 – 240Volt 47-63Hz Output 12 Volt / 2000mA

Operating conditions

Temperature	: +5°C to +40°C
Humidity	: < 70%

Storage & transport conditions

Temperature	: -20°C to +55°C
Humidity	: < 95 %

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