

AMD-2500 General Examination Camera



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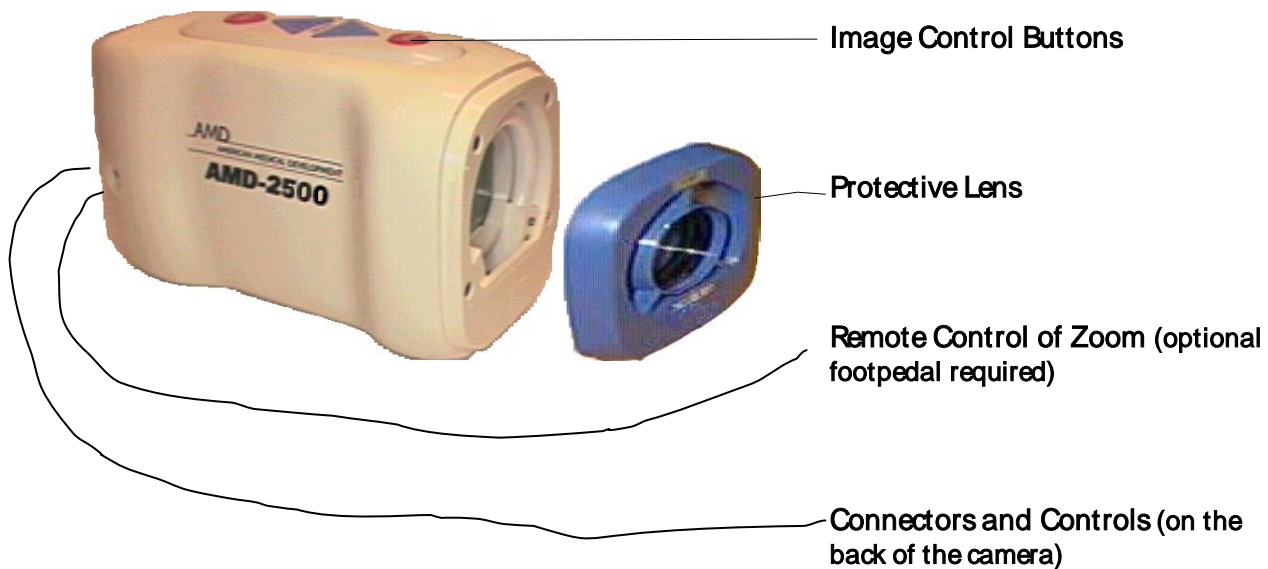
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Introducing the AMD General Examination Camera

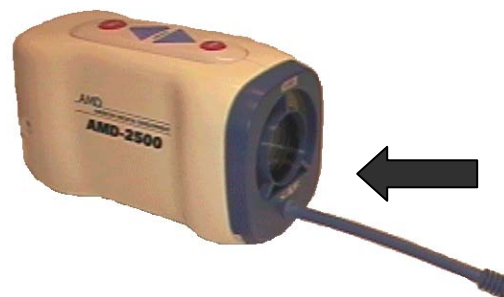
The AMD General Examination Camera can be used during video-conferencing to examine objects in fine detail. This hand-held camera is compact and lightweight, with all the controls located on the camera; no auxiliary remote control is required. The camera is multi-purpose, and can be used for many applications, including dermatology and dentistry. The small size and built-in controls allow for unobtrusive examination of various areas of the body.



For detailed information about the parts of the Examination Camera, refer to “Sorting Out the Details”.

Zoom Lens

The AMD General Examination Camera has a 50x Zoom Lens. For more information about the Zoom Lens, refer to “Sorting Out the Details”.



Using the Camera

Notes:

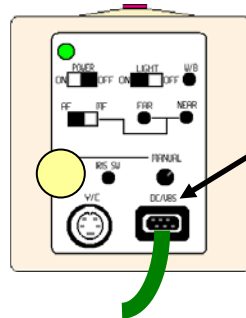


Setting Up the Camera

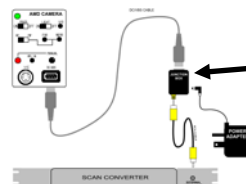
If the Examination Camera is not set up:



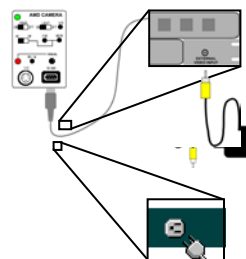
1. *If necessary, change the camera lens. For more information, refer to "Sorting Out the Details".*



2. *On the back of the Examination Camera, make sure that the DC/VBS cable is secure.*



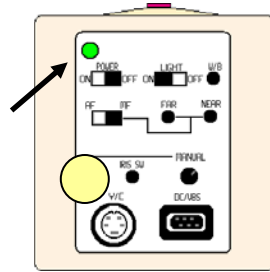
3. *Plug the following three cables into the AMD junction box:*
 - a) *DC/VBS cable*
 - b) *RCA video cable*
 - c) *Power adapter cord*



4. *Plug the RCA connector of the video cable into the External Video Input on the video-conference system.*
5. *Plug the power adapter cord into an outlet. The AMD-2500 must only be used with the power supply that ships with the product to ensure labelled safety standards are met. This power supply is manufactured by Jerome*

AMD General Examination Camera

Notes:



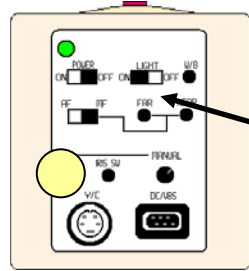
Industries, part WA112M.

6. *Move the Power switch to ON, move the Light switch to ON and verify that the green power indicator light is ON.*
7. *The AMD-2500 should be inspected for proper operation daily. The AMD-2500 should be cleaned/ disinfected after each patient contact (at a minimum of daily).*

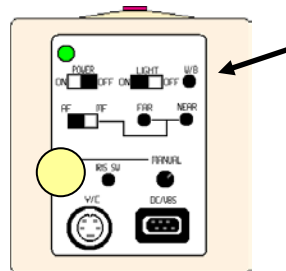
Notes:



Displaying an Object



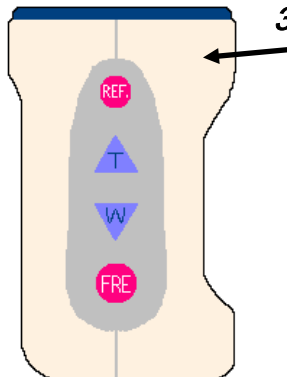
1. *Every time the Examination Camera is turned ON, adjust the White Balance.*
 - a) *Turn ON the Ring-Light, using the switch on the back of the camera.*



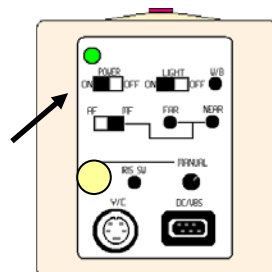
- b) *Focus the camera on a white sheet of paper. Fill the screen completely with the image of the white sheet.*
- c) *Press the WB button on the back of the camera for five seconds.*

The colors are automatically rebalanced. For more information about White Balance, refer to "Sorting Out the Details".

2. *Aim the Examination Camera at the object.*



3. *If necessary, adjust the image using the image control buttons on the top of the Examination Camera, as described in "Sorting Out the Details".*



4. *When you are finished using the Examination Camera:*
 - a) *Turn the Examination Camera Power OFF and turn the Light OFF.*

AMD General Examination Camera

Notes:



- 5. The AMD-2500 should be inspected for proper operation daily. The AMD-2500 should be cleaned/ disinfected after each patient contact (at a minimum of daily).*

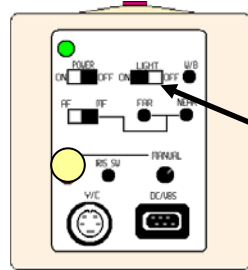
Notes:



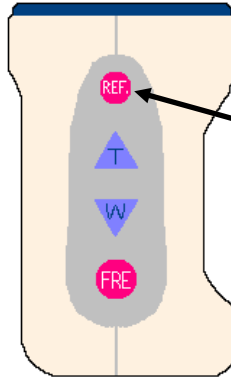
Adjusting the Image

If the image is affected by glare...

If the image is affected by glare caused by light reflection off of the object, or if there is not much definition in the image:



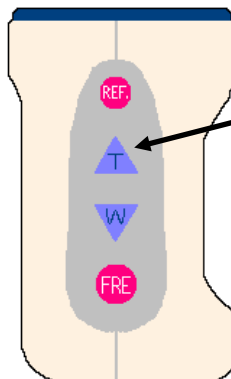
1. **Turn ON the Ring-Light using the switch on the back of the Examination Camera.**



2. **Press the REF button on the top of the Examination Camera to toggle the Reflection mode ON and OFF.**

If the image is too small...

1. **Center the object in the image window.**
2. **Zoom in by pressing the T button on the top of the Examination Camera.**



For more information about the Zoom Lens, refer to "Sorting Out the Details".

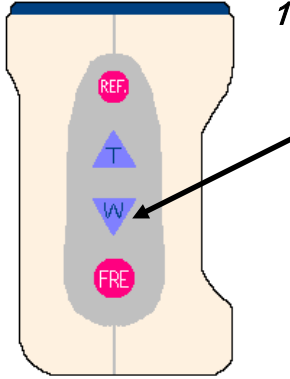
AMD General Examination Camera

Notes:



If the image is too large...

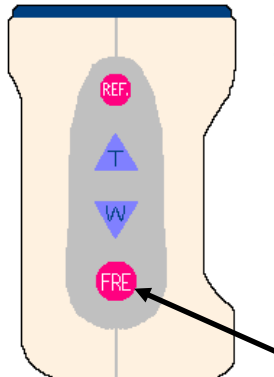
1. *Zoom out by pressing the W button on the top of the Examination Camera.*



Notes:



If the image is shaky...

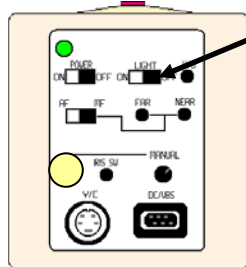


It may be difficult to maintain a still image on the screen due to the movement of the camera. To capture a freeze-frame of the image on the screen:

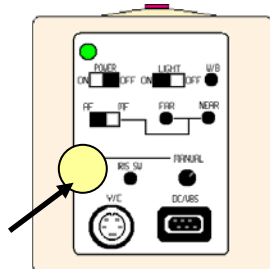
1. **Press the FRE button on the top of the Examination Camera.**

To unfreeze the image shown on the monitor, press the FRE button again.

If the image is too dark...

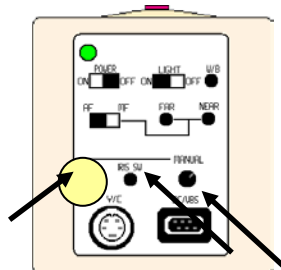


1. **Turn ON the Ring-Light using the switch on the back of the Examination Camera.**



2. **If the image is still too dark, make sure that the Examination Camera is using Automatic Iris Control.**

The iris indicator light on the back of the Examination Camera should be OFF.



3. **If the image is still too dark:**
 - a) **Press the IRIS SW button to disable Automatic Iris Control.**

The iris indicator light on the back of the Examination Camera should come ON.

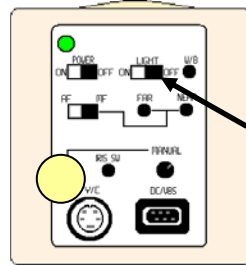
- b) **Turn the Manual Iris dial counter-clockwise to brighten the image.**

AMD General Examination Camera

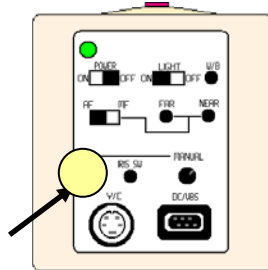
Notes:



If the image is too pale...

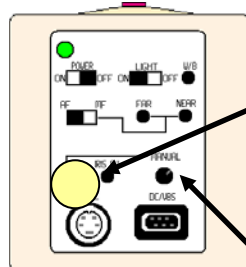


1. Turn OFF the Ring-Light using the switch on the back of the Examination Camera.



2. If the image is still too pale, make sure that the Examination Camera is using Automatic Iris Control.

The iris indicator light on the back of the Examination Camera should be OFF.



3. If the image is still too pale:
 - a) Press the IRIS SW button to disable Automatic Iris Control.
The iris indicator light on the back of the Examination Camera should come ON.
 - b) Turn the Manual Iris dial clockwise to darken the image.

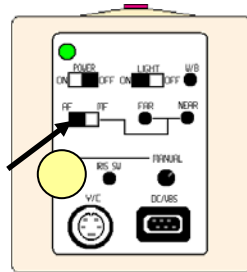
Notes:



If the image is fuzzy...

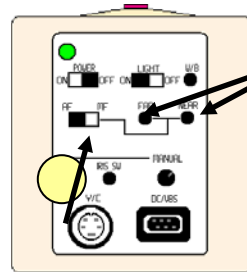


1. *If you are using the Zoom Lens, position the object at the end of the flexible rod.*



2. *Make sure that the Examination Camera is using Automatic Focus Control.*

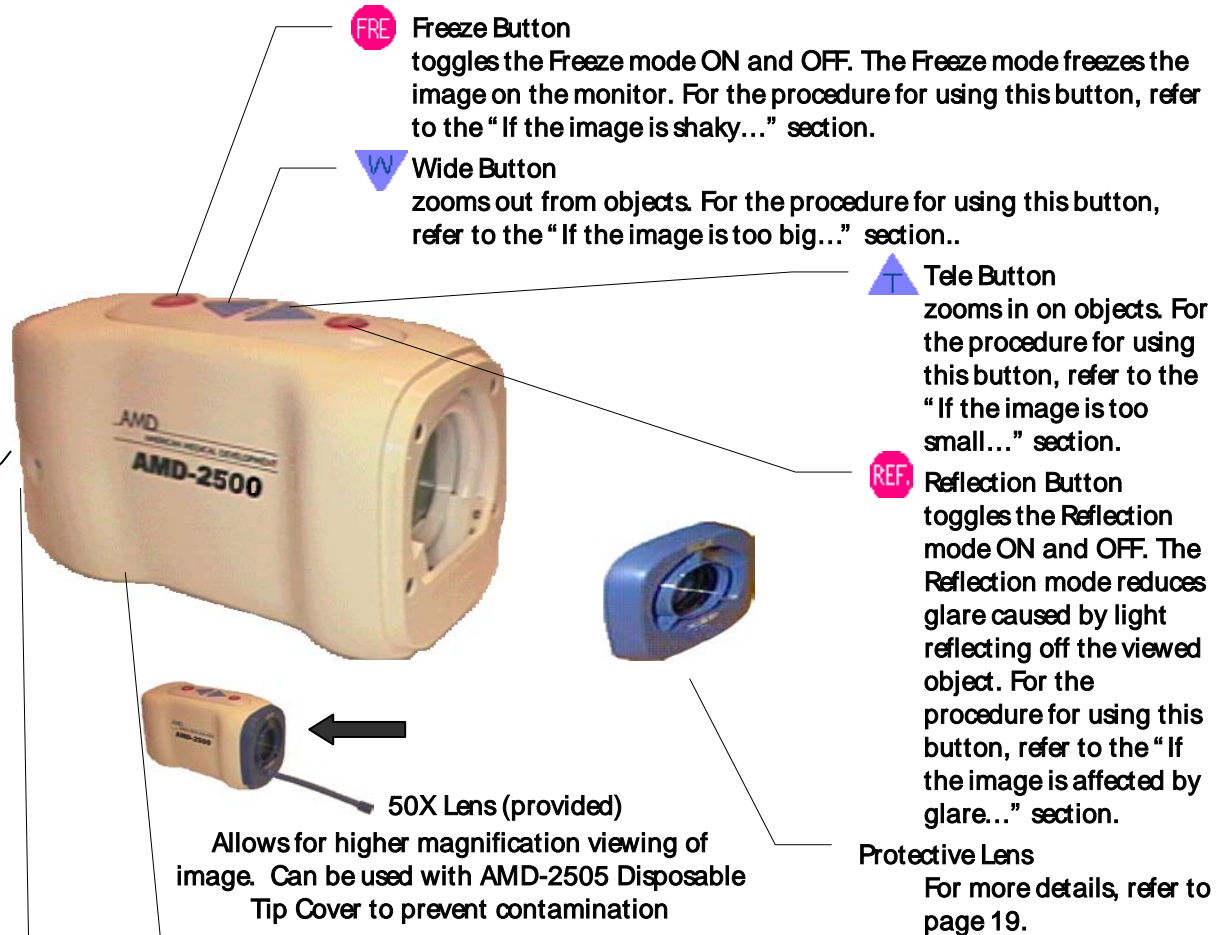
The Focus switch should be set to AF.



3. *If the image is still fuzzy:*

- a) *Move the Focus switch to MF to enable Manual Focus Control.*
- b) *To manually focus distant objects, press the FAR button. To manually focus close objects, press the NEAR button.*

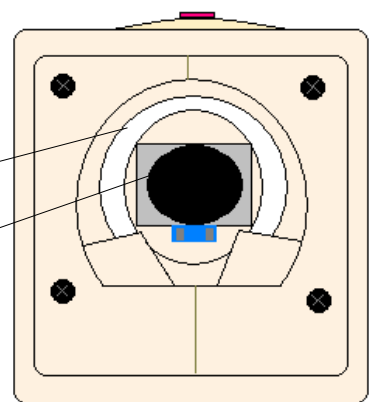
Sorting Out the Details



Camera

Connectors and Controls
(on the back panel)
For more details, refer to the next page.

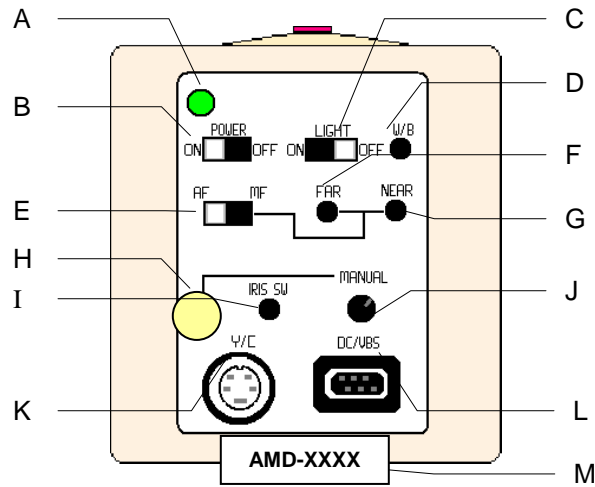
Camera—front view when the Protective Lens is removed:



Remote Control of Zoom
(Optional foot pedal required)

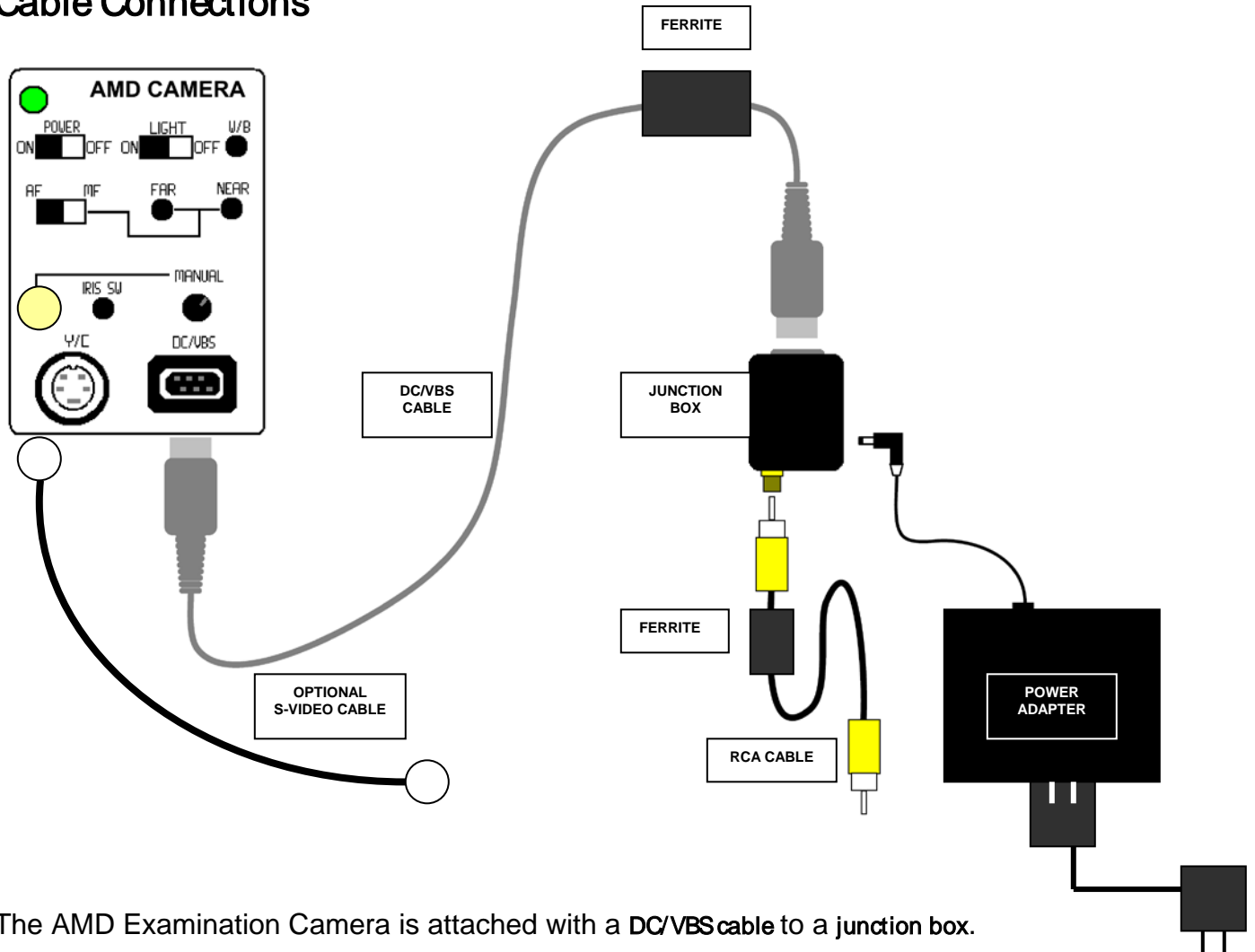
AMD General Examination Camera

Connectors and Controls



- A Power Indicator is illuminated (the green light is ON) when the camera is ON.
- B Power Switch turns the camera ON and OFF. The camera should be turned OFF when it is not being used.
- C Light Switch turns the fluorescent ring-light on the front of the camera ON and OFF. For the procedure for using this switch, refer to the sections “If the image is too dark...” and “If the image is too pale...”.
- D White Balance Button automatically rebalances the primary video colours (red, blue, and green) to compensate for different lighting types. If your image has a reddish or bluish tint, you should correct the White Balance. For the procedure for using this button, refer to “Displaying an object”.
- E Focus Switch switches between Automatic Focus (AF) and Manual Focus (MF). When set to Automatic Focus, the camera focuses on objects automatically. When set to Manual Focus, the FAR and NEAR buttons are used to focus on objects.
- F FAR manually focuses the camera on distant objects.
- G NEAR manually focuses the camera on close objects.
- H Manual Iris Indicator is illuminated (the yellow light is ON) when Manual Iris Control is ON.
- I Iris Button switches between Automatic Iris Control and Manual Iris Control. When set to Automatic Control, the camera automatically controls the iris. When set to Manual Control, the Manual Iris Dial is used to control the iris.
- J Manual Iris Dial manually controls the iris, allowing you to adjust the brightness or darkness of the image. For the procedure for using this dial, refer to sections “If the image is too dark...” and “If the image is too pale...”.
- K Y/C Port is used with a video-conference system requiring an S-VHS input. (optional cable required)
- L DC/VBS Port supplies power to the camera and sends video signals from the camera to the video-conference system. For connection details, refer to “Cable Connections” on the next page.
- M Serial number of product: Unique number identification of product.

Cable Connections



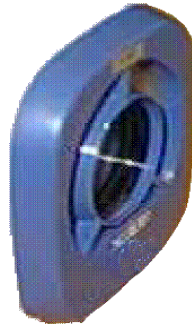
The AMD Examination Camera is attached with a DC/VBS cable to a junction box.

There are two connections from the junction box; the RCA cable plugs into the External Video Input of the video-conference system, and the power cord plugs into an outlet.

For details on hooking up the cables, refer to the procedure outlined in "Setting up the Camera".

Zoom Lens

The AMD General Examination Camera has two interchangeable lenses:



The Protective Lens provides protection for the camera lens and the ring-light.



The 50x Zoom Lens provides 50x magnification for a closer look at objects. This lens has a flexible rod that indicates the focal length of the lens. When you use this lens, place the tip of the rod gently on the object to be viewed, and the camera will be at the correct viewing distance.

The AMD-2505 Disposable Tip Covers can be used to protect the flexible tip of the 50x lens against contamination. These tip covers should be replaced/ disposed of properly as local rules govern after each patient contact. These tip covers “roll out” condom-style for installation.

* Local rules may require these contaminated tip covers to be treated as hazardous waste.

To remove a lens:



1. *Place your fingers in the indent on the lower left corner of the lens.*
2. *Pop the lens off.*

To attach a lens:



1. *Position the lens on the front of the camera.*
2. *Snap the lens in place.*

AMD General Examination Camera

AMD-2500 Product Specifications

There are no user serviceable or repairable parts inside the unit. The unit must be returned to AMD for repair.

Magnification (14" screen)	Zoom 1-50x (auto focus), 200x (optional)
Light Polarization	Yes
Pixels	½ inch; 410,000 pixels
Resolution (horizontal)	>430 lines
Signal-to-Noise Ratio	>48 db
Output format	NTSC
Output signal	Composite NTSC (BNC) & S-VHS
On-board freeze	Yes
Color adjustments	Auto white balance
Auto Gain Control	Full iris control
Lighting	Built-in fluorescent
Operating temperature	0°-40° C
Operating humidity	< 90%
Power Supply Output Power	12vdc 1.25 A.
Power Supply Input Voltage	100-240 VAC 50-60Hz, 40VA
Power Supply Rating	Approved to UL 544/2601.1, cUL(CSA)22.2#125/601.1, TUV EN60601.1 + CE LVD The AMD-2500 must only be used with the power supply that ships with the product to ensure labelled safety standards are met. This power supply is manufactured by Jerome Industries, part #WA112M. 2.2" x 3.7" x 2.9"/5.588cm x 9.398cm x 7.366cm
Camera Dimensions (w x d x h)	0.5 lbs./0.23kg
Camera Weight	Camera surface and lenses can be cleaned using a cloth moistened with a mild detergent, or a cloth dampened with Ethyl alcohol, The AMD-2505 Disposable Tip Covers can be used to protect the flexible tip of the 50X lens against contamination. These tip covers should be replaced/disposed* of properly after each patient contact. The tip covers "roll out" condom style for installation.
Camera Cleaning/Disinfection	There are no user serviceable or field repairable circuits, return to factory for repair.
Maintenance	
Optional Equipment: AMD-2510	200x Zoom lens attachment, clip-on style for use when higher magnification is required
AMD-2505 (500/box)	Disposable tip cover (sheath) for 50x lens
AMD-2525	Tripod for fixation of camera

* Local rules may require that these contaminated tip covers be treated as hazardous waste.

Power Supply Safety Ratings



Type BF equipment



Read all instructions provided with product



Class II equipment



Indoor use only

AMD-2500 System Configuration Diagram

