

**REF** AC-1110 (GIMA 29612) – AC1310 (GIMA 29613)

# AC-1000 Series Colposcope User's Manual



(Please read the instruction carefully before using it)

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All serious accidents concerning the medical device supplied by us must be reported to the manufacturer and competent authority of the member state where your registered office is located.

AC1000-UM02-EN  
Version: B2  
2022-08-15  
M29612-GB-Rev.2-04.25

**Alltione (Guangxi) Instrument Co., Ltd.**

Medical Device compliant with Regulation (EU) 2017/745

Symbols, labels and information:

	Manufacturer		Authorized representative in the European Community
	Serial number		Medical Device compliant with Regulation (EU) 2017/745
	Date of manufacture		PSE label
	Lot number		Follow instructions for use
	WEEE disposal		Handle With Care
	Keep in a cool, dry place		Upward
	For indoor use		Equipotentiality
	Medical device		Product code
	No pushing		Unique device identifier



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 Made in China



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## Security Warning

For using the instrument safely in a correct way and ensuring the instrument in a good state, please read this instruction carefully before operating.

It shall change some components to improve the quality and performance of instrument. Therefore, it may have some different with the instruction. Please know that the stander equipment be provided by factory shall prevail.



Please attach importance to and perform the  
contraindications and announcements

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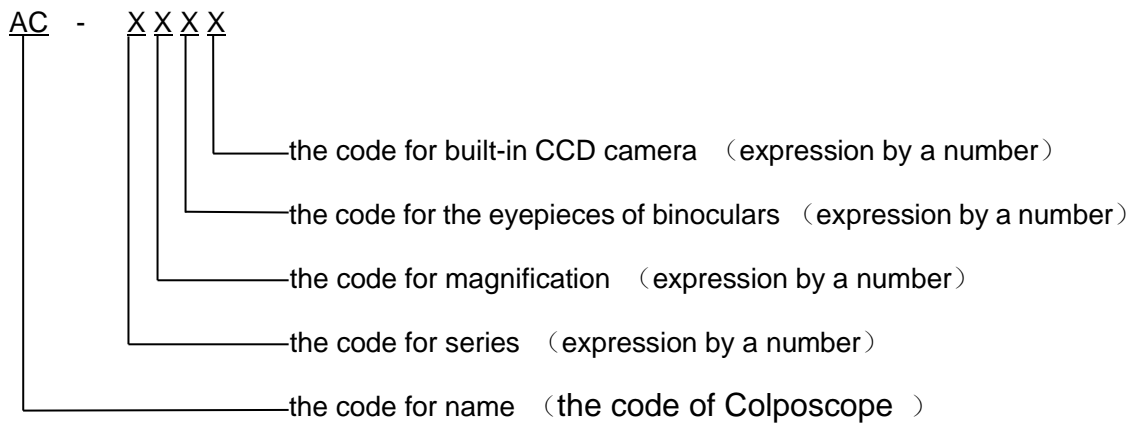
# 1 Introduction

## 1.1 Product Feature

- Vaginal surgery microscope (Colposcope) apply to gynecological microsurgery and gynecological examination.

- The Colposcope of AC-1000 series have 2 model with one-step magnification and three-step magnification, huge depth of field, improve contrast by green filter, can acquire high definition images, excellent 3D percept, can identify microscopic variation by high quality illuminant and high magnified image; operate easily, can use for diagnostics and treatment. It provide more advanced ways to clinical diagnosis and teaching research.

- Classified by prevent electric shock type: II type
- Colposcope model labeled graph as follows:



the code for series: 1--- AC-1000 Series

the code for magnification: 3--- Three-step Magnification

the code for the binocular head: 1--- The straight binocular head, 2--- The inclined binocular head

the code for built-in CCD camera: 0--- Without built-in CCD 1--- With built-in CCD

Note: AC-1000 Series Without built-in CCD.

- Adoption Standard

IEC60601-1, IEC60601-1-2

## 1.2 Adaptation of Product

The colposcope apply to clinical observation for the lesion of vagina, cervix, vulva, etc.

### **Contraindication :**



- (1) Should not checking during menstrual period or vaginal bleeding**
- (2) Should not perform gynecological examination and cervical scraping smear before 24 hours of vaginal examination to avoid the damage of epithelial cell.**
- (3) Should not have sex 3 hours before the vaginal examination.**
- (4) Should not take bath in tub ,vaginal douche and use suppository 1 day before the vaginal examination**

## 1.3 Product Formation

The colposcope of AC-1000 series are composed with optical system (include objective, variable-power lens, eyepiece, illuminating system, stand and electrical system. You can choice various corresponding mountings for different requirements.

## 2 Security

### 2.1 Intended Use

The colposcopy Examination can help doctor to discover and ensure the information (location, detail, condition, range and extent) of cervical erosion, cervical polyp, cervical intraepithelial neoplasia (CIN), cervical cancer, colpitis, cervical intraepithelial neoplasia, subclinical vulvar papilloma lesion.

The colposcope is not only worth diagnosing cervical precancerous lesions and distinguishing tumor or inflammation, but also have special applied worth in treatment, especially the lesion of cervical intraepithelial neoplasia (CIN).Because the colposcope can see the location and range of epithelia changement, you can use the colposcope take more information about the examination of urethra and vulva in the same way. Its main function:

- Ensure cervical precancerous lesions, it is in favor of wipe out earlier, prevent it grow into cancer;
- Choice abnormal lesion, Locating biopsy, Increase the positive rate of biopsy;

- Ensure the extent of disease, especially cervical canal;
- Ensure the Squamous Colum Junction(SCJ) is normal or abnormal and the range of transition zone;
- Distinguish infiltrating carcinoma.

## 2.2 The Environment for Use

### a) Transport and Storing

- Ambient Temperature Range:  $-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$ ;
- Relative Humidity Range:  $10\% \sim 80\%$ ;
- Barometric Pressure Range:  $500 \text{ hPa} \sim 1060 \text{ hPa}$ 。

### b) Operation

- Ambient Temperature Range:  $5^{\circ}\text{C} \sim 40^{\circ}\text{C}$ ;
- Relative Humidity Range:  $30\% \sim 80\%$ ;
- Barometric Pressure Range:  $700 \text{ hPa} \sim 1060 \text{ hPa}$ ;
- Power Supply: DC12/3A (Adapter:Input:AC100-240V 50/60Hz, Output:DC12V 3A)。

## 2.3 Feature of Security

- Classified by prevent electric shock type: **II** type;
- Classified by prevent electric shock degree: **No Applied Part**;
- Classified by input fluid protection degree: **IPX0**
- The Colposcope doesn't belong to AP&APG equipment;
- Classified by operation mode: continuous operation;
- Power Supply: DC12/3A (Adapter:Input:AC100-240V 50/60Hz, Output:DC12V 3A)。
- Max input power: 22VA;
- The Colposcope can't defend the defibrillator discharge ;
- The colposcope does not have signal output or signal input parts.

### 3 Instruction for Colposcope

#### 3.1 Single-step Colposcope AC-1110

Featuring LED Light Source:

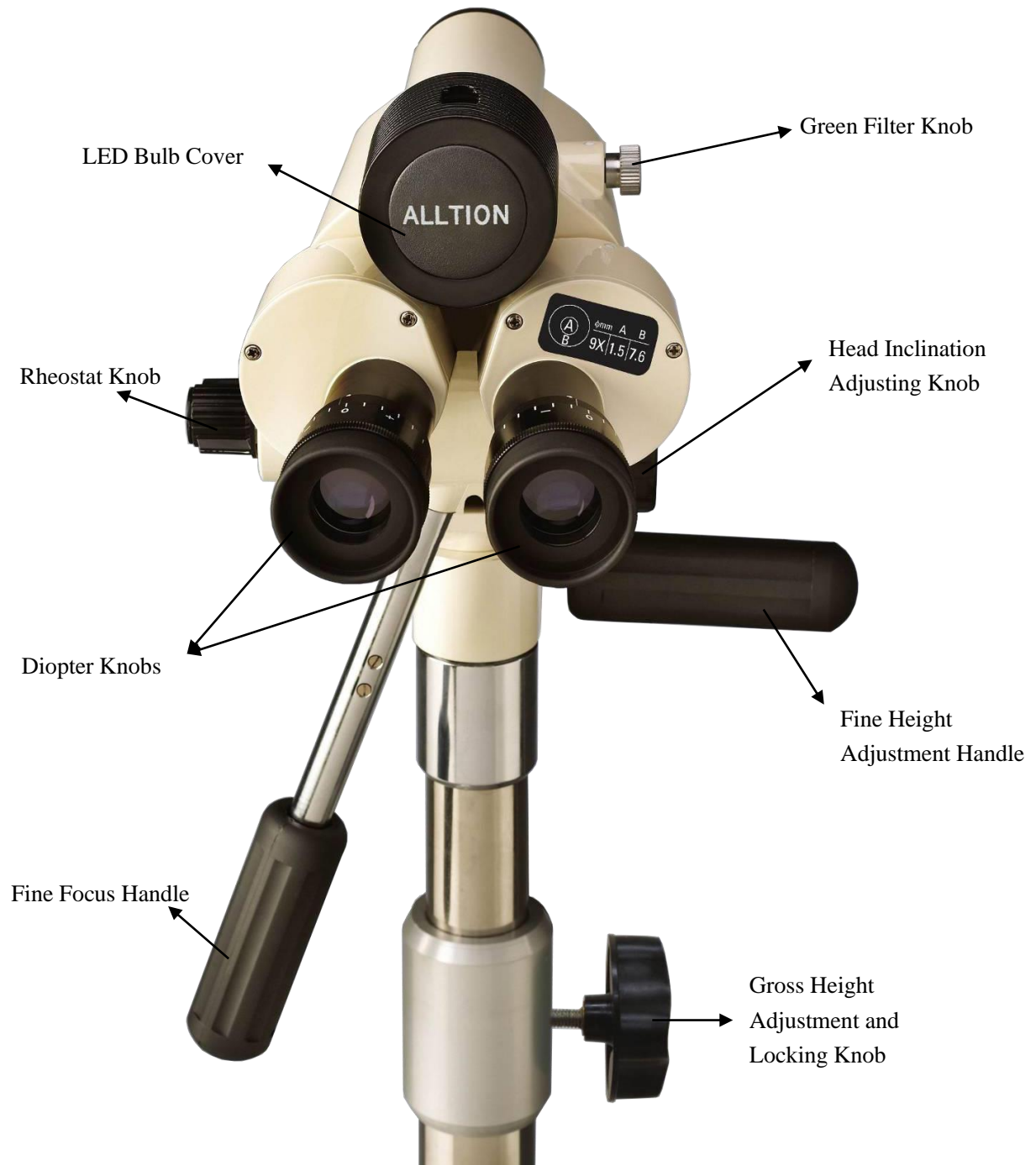
- Lasts longer
- Cool to the touch
- Gives you move of a sure color balance



Now easier to move with our new roller base. Plus, once in position, the platform remains stable.







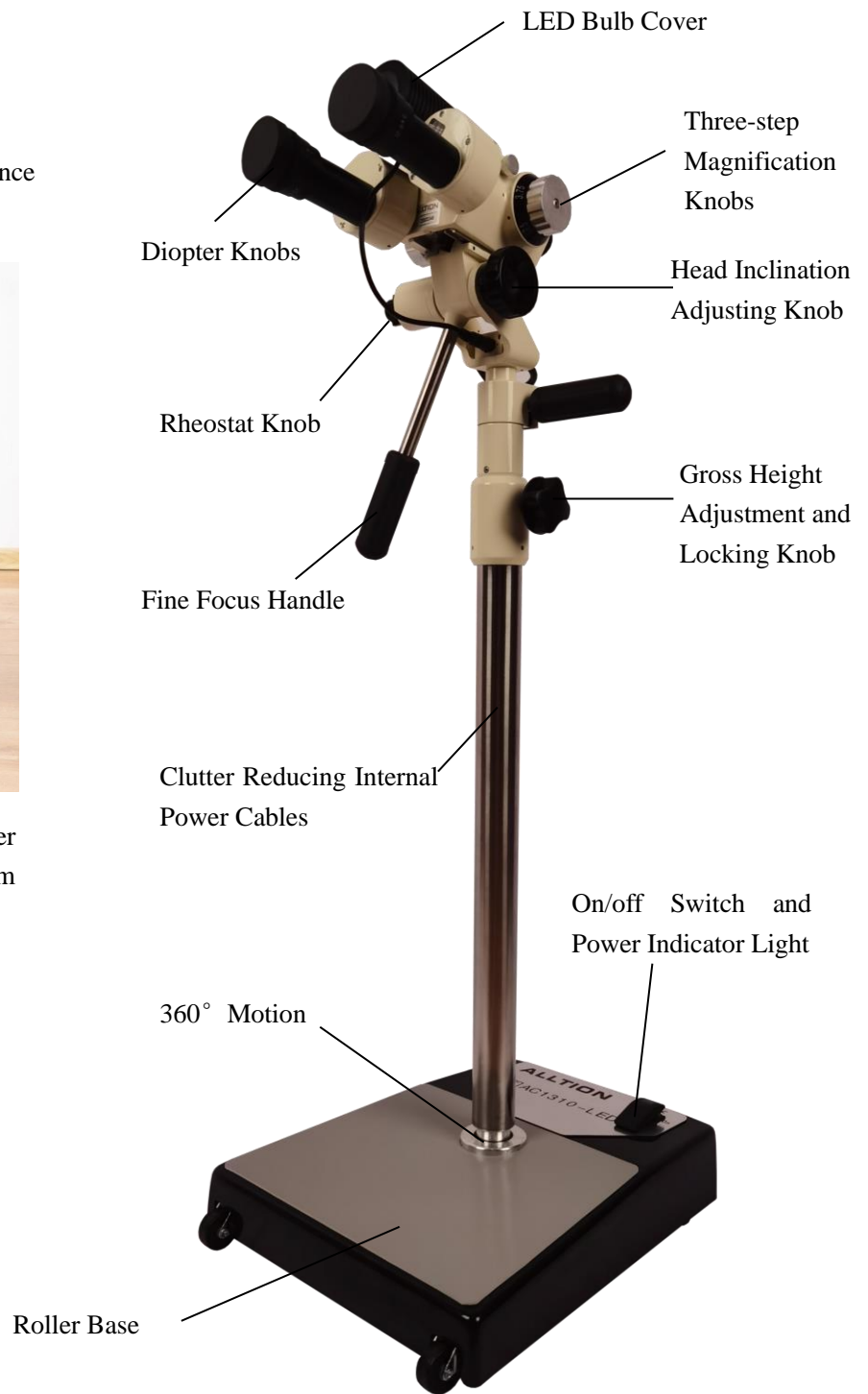
### 3.2 Three-step Colposcope AC-1310

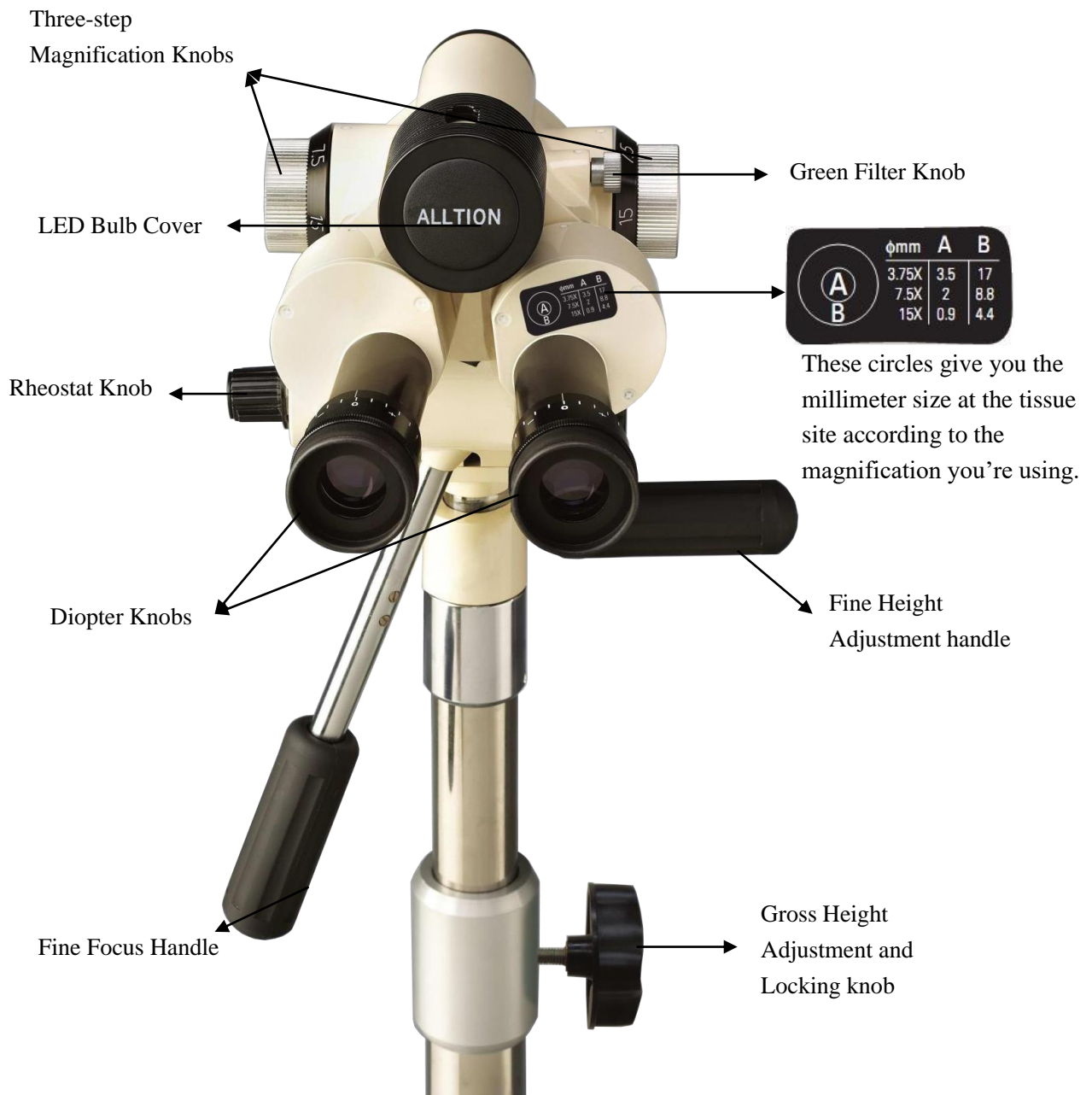
Featuring LED Light Source:

- Lasts longer
- Cool to the touch
- Gives you move of a sure color balance



Now easier to move with our new Roller base. Plus, once in position, the platform remains stable.





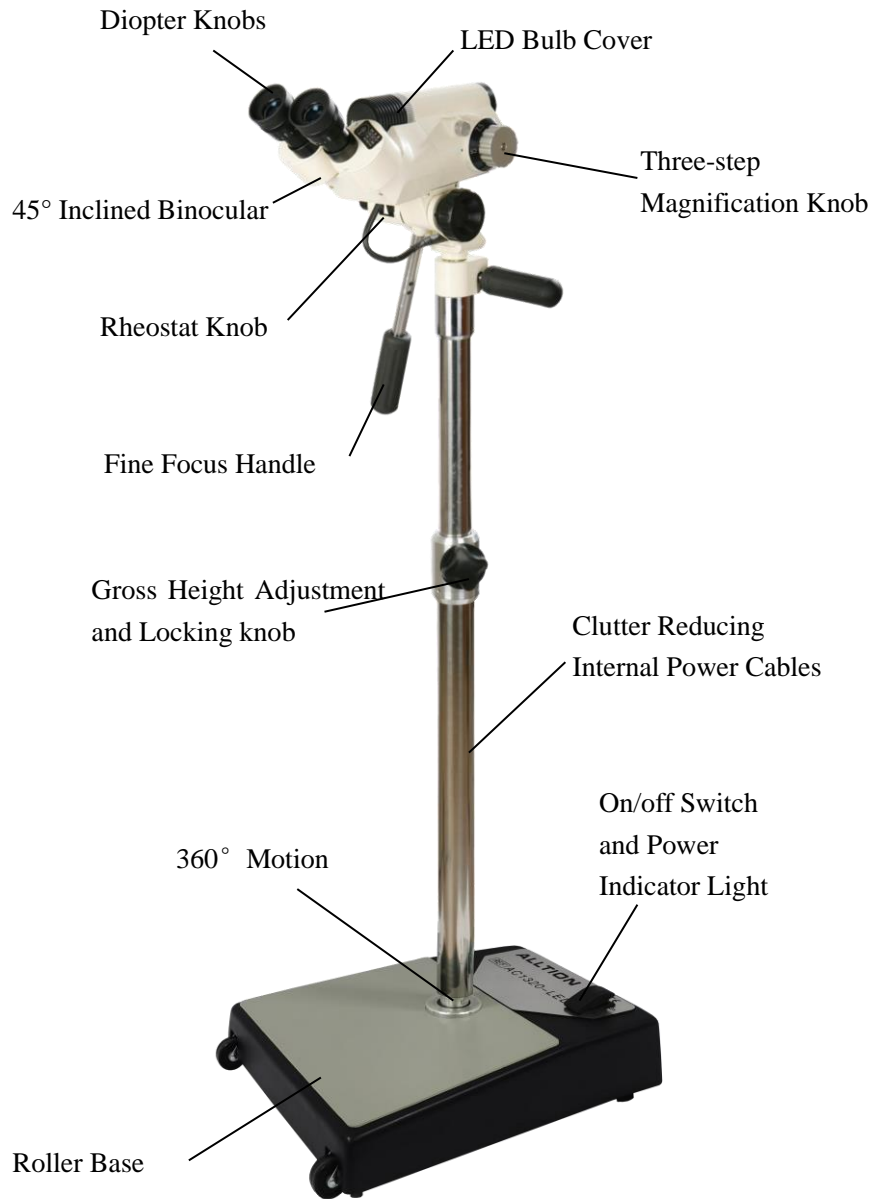
### 3.3 45° Three-step Colposcope AC-1320

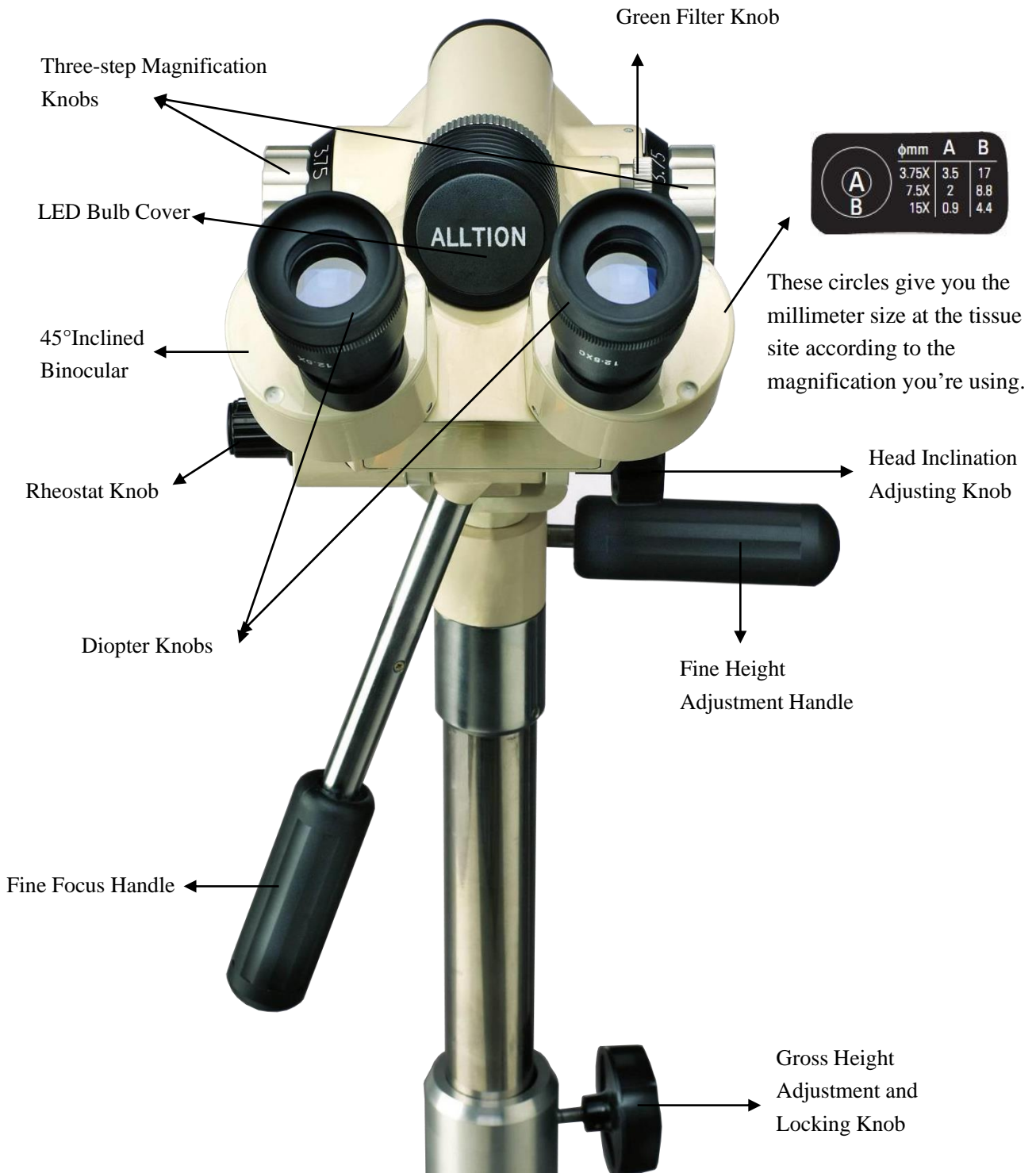
Featuring LED Light Source:

- Lasts longer
- Cool to the touch
- Gives you move of a sure color balance



Now easier to move with our new Roller base. Plus, once in position, the platform remains stable.





DC Power Plug  
5.5\*2.1mm



### 3.4 Indications for Use

The ALLTION brand Colposcope is a device designed to permit viewing of the tissues of the vagina and cervix by a telescopic system located outside the vagina. A colposcope is used to diagnose and examine abnormalities of the vagina and cervix.

### 3.5 Features

360° Motion



#### 3.5.1 AC-1110 Features

- Hand polished optics for exceptional clarity
  - Individual y adjustable binocular optics for true stereoscopic view
  - Optical measuring circles for precise measurements
  - Focal length: 316mm
- Field of View: > 22mm diameter dia.  
Depth of Field: > 8mm
- Smooth adjustable controls for gross and fine focus
  - Universal Teflon® ball joint never has to be tightened or adjusted and it gives you fluid 360° motion for gross focus
  - A space saving small footprint: Length is 360mm, Width is 310mm
  - Clutter reducing internal power cable
  - Working height: 838mm – 1194mm
  - Clear, bright, long-lasting LED light source
  - Light intensity > 25,000 LUX
  - One piece shipping that puts you in operation with minutes of opening the box (no salesperson necessary)
  - Overall magnification: 9X

#### 3.5.2 AC-1310 Features

- Hand polished optics for exceptional clarity
  - Individual y adjustable binocular optics for true stereoscopic view
  - Optical measuring circles for precise measurements
  - Focal length: 300mm
- Magnification: 15X, 7.5X, 3.75X  
Field of View: 9.5mm, 18.5mm, 38mm dia.  
Depth of Field: 5mm, 8mm, 34mm
- Smooth adjustable controls for gross and fine focus
  - Universal Teflon® ball joint never has to be tightened or

adjusted and it gives you fluid 360° motion for gross focus

- A space saving small footprint: Length is 360mm, Width is 310mm
- Clutter reducing internal power cable
- Working height: 838mm– 1194mm
- Clear, bright, long-lasting LED light source
- Light intensity: > 25,000 LUX
- One piece shipping that puts you in operation within minutes of opening the box (no salesperson necessary)
- Overall magnification: 3.75X, 7.5X, 15X

### **3.5.3 AC-1320 Features**

- Hand polished optics for exceptional clarity
- Individual y adjustable binocular optics for true stereoscopic view
- Optical measuring circles for precise measurements
- Optic angle is 45°
- Focal length: 300mm

Magnification: 15X, 7.5X, 3.75X

Field of View: 9.5mm, 19mm, 38mm dia

Depth of Field: 5mm, 8mm, 32mm

- Smooth adjustable controls for gross and fine focus
- Universal Teflon® bal joint never has to be tightened or adjusted and it gives you fluid 360° motion for gross focus
- A space saving small footprint: Length is 360mm, Width is 310mm
- Clutter reducing internal power cable
- Working height: 888mm – 1244mm
- Clear, bright, long-lasting LED light source
- Light intensity: > 25,000 LUX
- One piece shipping that puts you in operation within minutes of opening the box (no representative necessary)
- Overall magnification: 3.75X, 7.5X, 15X

## 4 Installation of Colposcope

### 4.1 Contents of Box

- 1 Colposcope
- 1 Power adaptor
- 1 Plug (US, UK, EU, AUS)
- 1 Plastic Dust Cover
- 1 Instructions for Use
- 1 Phillips Screwdriver

### 4.2 Removing the Colposcope from the Box

The colposcope comes with a one year warranty with free repairs (shipping not included). Please keep this box and the protective foam for at least a year; should you need to return it to ALLTION for any warranty repairs. Otherwise there will be a nominal fee for us to send you a new box.

- During the handling and unpacking, the box must be placed in the up position according to the arrows that are printed on the outer box.
- Remove top protective material.
- Grasp the colposcope at the center post (A cutout in the foam for your hands is provided.) and lift the colposcope straight out of the protective material. Note: When removing the instrument out of the protective foam, remove with care to prevent the instrument from being damaged.

### 4.3 Setting up the Colposcope

- Remove the power adapter from the shipping box.
- Insert the power adapter into the DC plug located at the back end of the base.
- Insert the other end of the power adapter into the wall socket.
- Depress the power on/off button with your right foot, to turn on the power. The power indicator light will come on at that time.
- Important: Rotate the Rheostat Knob to turn on the Viewing Light.
- When the instrument is ready to be shut off, simply depress the power on/off button with your right foot. The power indicator light will go off





## 5 Precautions

- A. For storage, the instrument should be placed in a clean, dry environment with stable temperatures to extend the life of the components and ensure longevity of the instrument.
- B. Please cover the colposcope with the plastic dust cover that is included with this instrument. This will keep the optics and components relatively dust free.
- C. When storing or carrying the instrument, instrument to the lowest position. This will help ensure that if it is inadvertently hit, it will resist tipping over.



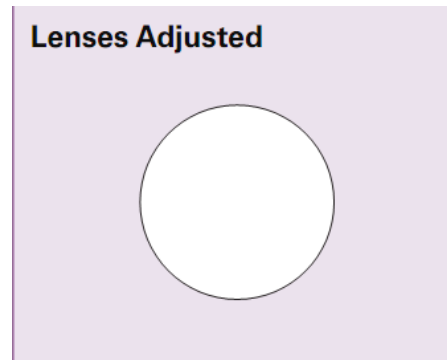
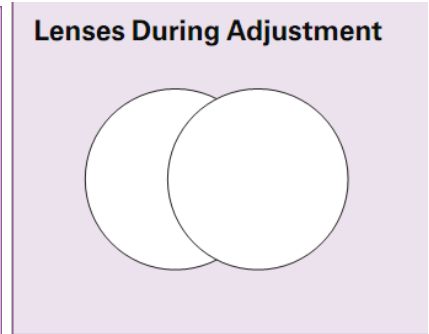
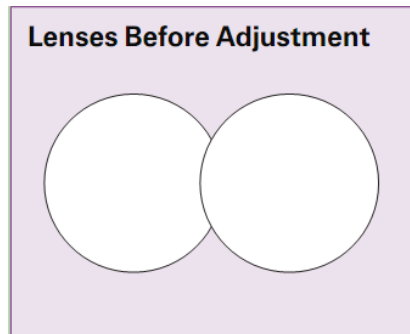
## 6 Adjustment of the Eyepieces

The interpupillary distance (IPD) is the distance in the spacing between a person's eyes.



### To Adjust the IPD

- A. Turn on power by pressing the foot-switch on the base. On/off indication light will come on.
- B. Turn the black Rheostat Knob on the left to adjust the light intensity. Light will project from upper part of the Colposcope.
- C. Gently place your eyes against the black rubber eyepieces. Grasp the tan metal housing with both hands. Gently rotate the barrels together or apart. A singular circular image should be seen through both eyepieces. This adjustment is similar to adjusting the eyepieces of binoculars.



## 7 Adjustment of the Diopter Knobs

### Focusing the Colposcope

- A. Set the Diopter Knobs at zero.
- B. Turn the Colposcope on, place your eyes against the eyepieces, and focus the Colposcope on a fixed object until that object appears clear and sharp.
- C. It is recommended to focus on letters such as a *book* or a *magazine*.
- D. Close your right eye. With your left hand, rotate the Diopter Knob until the object is clear and sharp for your left eye. Note: The Diopter allows you to adjust for plus and minus vision corrections.
- E. Then close your left eye. With your right hand, rotate the diopter knob until the object is clear and sharp for your right eye. Note: The Diopter allows you to adjust for plus and minus vision corrections.



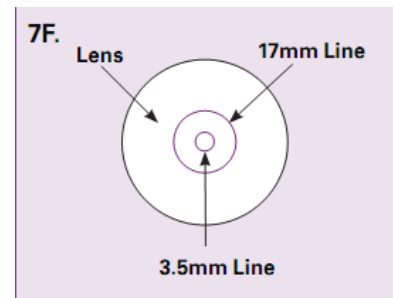
**F.** This adjustment of the diopters will put the Colposcope in focus. You will see two measuring circles through the lens. Since your Colposcope has three different magnifications, the measurement at the tissue site will vary according to the magnification you're using. The reference chart gives you the correct size per magnification change. Note: There is a chart on the right tan metal housing.

**G.** It is important to keep a record of the adjustments on the Diopters for both your left and right eyes. Since most offices have multiple people using the Colposcope, the eyepieces will be different when someone else wants to use it. By remembering your diopter settings clarity can be achieved by simply moving the diopters to your setting when you are ready to use the Colposcope. This avoids you going through steps A–E each time.

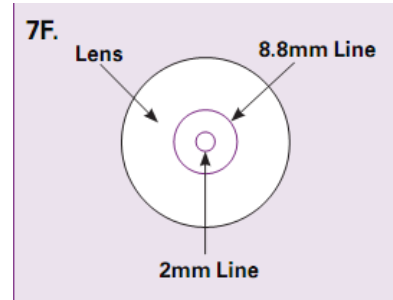
**A Note for Eyeglass Wearers:**

For best results when wearing eyeglasses, fold down the Colposcope's rubber eye cups. Then place your eyeglasses against the folded down eye cups while using the Colposcope. When you are finished using the Colposcope, unfold the rubber eyepieces to maintain the correct memory in those rubber eyepieces.

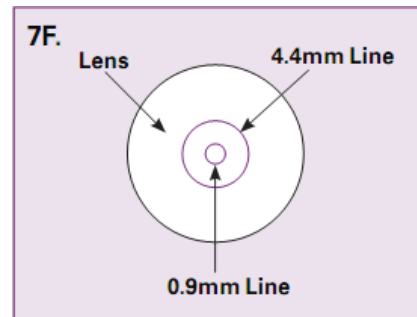
**Measurement at Tissue Site 3.75X**



**Measurement at Tissue Site 7.5X**



**Measurement at Tissue Site 15X**



	φmm	A	B
A	3.75X	3.5	17
B	7.5X	2	8.8
	15X	0.9	4.4



## 8 Colposcope Instructions for Use

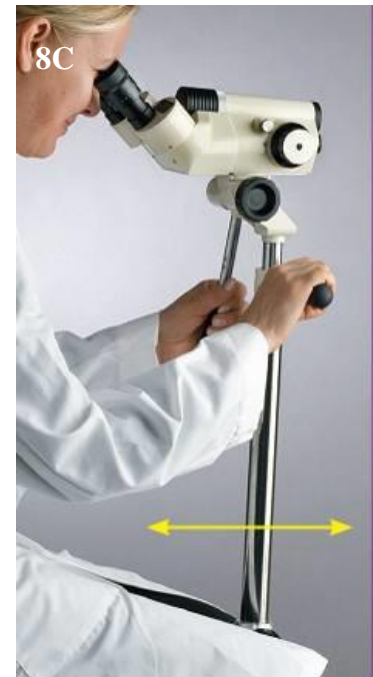
The following briefly describes using the Colposcope with a patient. It is recommended that you practice using the Colposcope to familiarize yourself with all of the features it has to offer.

**A.** With patient in lithotomy position, your Colposcope should be placed so that the head of the scope is 300mm from the area you wish to view, with the post to as near vertical as possible. Rotate the Gross Height Adjustment and Locking Knob to loosen it and move the inner post up or down. Tighten the knob to lock the inner post in place.

**B.** In a sitting position, place your feet on the rubber pad part of the base. Place your eyes against the eyepiece. Adjust for pupillary distance and make sure that you set your correct diopter reading. Place your right hand on the Fine Height Adjustment Handle and your left hand on the Fine Focus Handle. Note: Do not try to focus with Fine Focus Adjustment at this point.

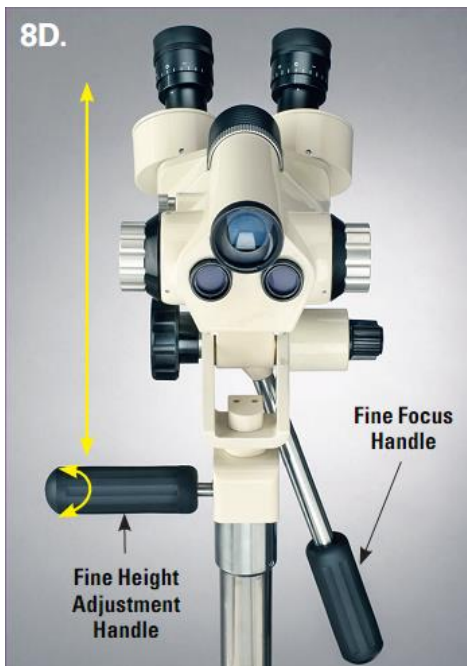
**C.** With your right hand on the Fine Height Adjustment Handle, slowly push or pull the Colposcope, until the field comes into view.

Angled optics for ease of use.





## Move Head Up & Down



Twist the adjustment handle to move the head up or down.

If patient is not centered, you can move the Colposcope head in multiple directions to change your field of vision. See photos D–H.

### Move Head Left



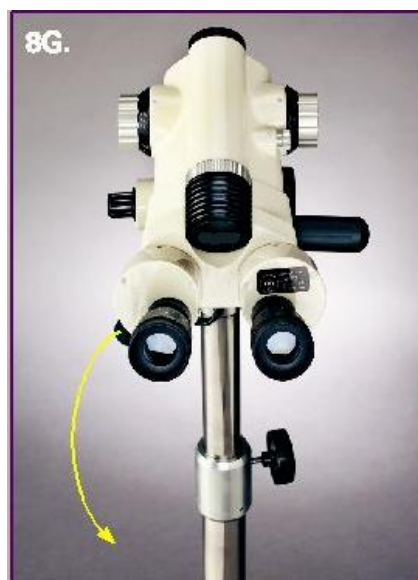
Push the Fine Height Adjustment Handle forward and to the left (counterclockwise).

### Move Head right



Pull the Fine Height Adjustment Handle backward and to the right (clockwise).

### Angle Head Up



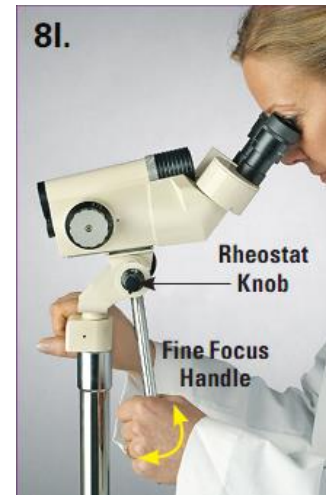
Push the Fine Focus Handle down and forward.

### Angle Head Down



Pull the Fine Focus Handle up and backward.

I. Adjust the Fine Focus Controls to provide clear, magnified views of the area to be examined. Rotate your left hand on the Fine Focus Handle which will finely move the optics towards or away from the object that you wish to view. Also, rotate your right hand which is on the Fine Height Adjustment Handle up or down to raise or lower the optics. Adjust light intensity rheostat as needed by turning the black Rheostat Knob. Turn the silver Green Filter Knob for optimum assessment of affected area.



**Note:** Both the black Rheostat Knob and the silver Green Filter Knob are conveniently located on the colposcope head, thus allowing the user complete control without looking up from the eyepieces

J. The colposcope head may be tightened or loosened according to your preference by turning the Head Inclination Adjusting Knob.



## 9 Selecting Your Preferred Level of Magnification

The AC-1310 & AC-1320 offer you the advantage of increasing or decreasing magnification during a colposcopic examination.

- A. When viewing the cervix, reach up and rotate the Three-Step Magnification Knob.
- B. Rotate it to your desired magnification (3.75, 7.5, or 15). When moving from one magnification to another, slight adjustments in the fine focusing mechanism might be necessary.
- C. Turn the Fine Focus Handle.



## 10 Moving the Colposcope

- A. Rotate the Gross Height Adjustment and Locking Knob to move the post to a comfortable position.
- B. Tighten the Gross Height Adjustment and Locking Knob.
- C. Place your foot between the wheels at the front end of the base.
- D. With your hand on the Fine Height Adjustment Handle, pull forward and roll across the floor.



## 11 Technical Data Continued

### Guidance and Manufacturer's Declaration – electromagnetic Emission – for all Equipment and Systems

1	<b>Guidance and manufacturer's declaration – electromagnetic emission</b>		
2	The AC-1000 is intended for use in the electromagnetic environment specified below. The customer or the user of the AC-1000 should assure that it is used in such an environment.		
3	<b>Emissions test</b>	Compliance	<b>Electromagnetic environment - guidance</b>
4	RF emissions CISPR11	Group 1	The AC-1000 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
5	RF emissions CISPR11	Class A	The AC-1000 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
6	Harmonic emissions IEC 61000-3-2	Class A	
7	Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

### Guidance and Manufacturer's Declaration – electromagnetic Immunity – for all Equipment and Systems


<b>Guidance and manufacturer's declaration – electromagnetic immunity</b>			
The AC-1000 is intended for use in the electromagnetic environment specified below. The customer or the user of the AC-1000 should assure that it is used in such an environment.			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment - guidance</b>
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient / burst IEC 61000-4-4	± 2 kV for power supply lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode	± 1 kV differential mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and	0 % U <sub>T</sub> ; 0.5 cycle At 0°,45°,90°,135°,	0 % U <sub>T</sub> ; 0.5 cycle At 0°,45°,90°,135°,	Mains power quality should be that of a typical commercial or hospital



voltage variations on power supply input lines IEC 61000-4-11	180°,225°,270°and 315°  0 % U <sub>T</sub> ; 1 cycle and  70 % U <sub>T</sub> ; 25/30 cycles Single phase: at 0°  0 % U <sub>T</sub> ; 250/300 cycle	180°,225°,270°and 315°  0 % U <sub>T</sub> ; 1 cycle and  70 % U <sub>T</sub> ; 25/30 cycles Single phase: at 0°  0 % U <sub>T</sub> ; 250/300 cycle	environment. If the user of the AC-1000 requires continued operation during power mains interruptions, it is recommended that the AC-1000 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U <sub>T</sub> is the a. c. mains voltage prior to application of the test level.			

### Guidance and Manufacturer's Declaration – electromagnetic Immunity – for Equipment and System that are not Life-supporting

Guidance and manufacturer's declaration – electromagnetic immunity			
The AC-1000 is intended for use in the electromagnetic environment specified below. The customer or the user of the AC-1000 should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 V rms  150 kHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz	3 V rms  150 kHz to 80 MHz 6 V in ISM bands between 0,15 MHz and 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the AC-1000, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  <b>Recommended separation distance</b>  $d = \left[ \frac{3.5}{V_1} \right] \sqrt{P}$  $d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$ 80 MHz to 800 MHz  $d = \left[ \frac{7}{E_1} \right] \sqrt{P}$ 800 MHz to 2.7 GHz

<p>Radiated RF</p> <p>IEC 61000-4-3</p>	<p>3 V/m</p> <p>80 MHz to 2.7 GHz</p>	<p>3 V/m</p> <p>80 MHz to 2.7 GHz</p>	<p>where <math>p</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended separation distance in metres (m).<sup>b</sup></p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,<sup>a</sup> should be less than the compliance level in each frequency range.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
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NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic is affected by absorption and reflection from structures, objects and people.

a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the AC-1000 is used exceeds the applicable RF compliance level above, The AC-1000 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the AC-1000.

b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m.

**Recommended Separation Distances between Portable and Mobile RF Communications Equipment and the Equipment or System -for Equipment and Systems that are not L Life-supporting**

**Recommended separation distances between portable and mobile RF communications equipment and the AC-1000**

The AC-1000 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the AC-1000 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the AC-1000 as recommended below, according to the maximum output power of the communications equipment

Rated maximum output of transmitter  W	Separation distance according to frequency of transmitter		
	150 kHz to 80 MHz  $d = [\frac{3.5}{V_1}] \sqrt{P}$	80 MHz to 800 MHz  $d = [\frac{3.5}{E_1}] \sqrt{P}$	800 MHz to 2.7 GHz  $d = [\frac{7}{E_1}] \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

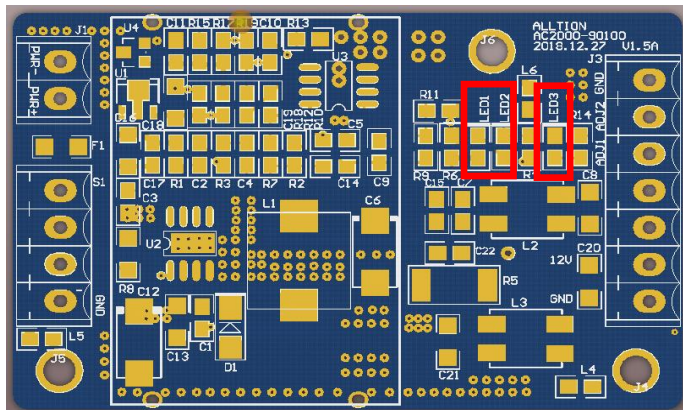
For transmitters rated at a maximum output power not listed above the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

## 12 Troubleshooting

Trouble	Check	Possible reason	Remedy
Illumination failure	Power switch indicator Not light	Main power broken-down	Contact a local electrician
		Never switch on the power switch.	Switch on the power switch.
		The adaptor has been melted	Replacing the adaptor
	Power switch indicator light	Illuminate brightness adjusting button is in low position	Adjust the button to the high position
		The LED has burnt.	Contact the After-sales service Dept.
	LED1 and LED2 on the circuit board is light (blue)	The LED has burnt or connection line loosening	Contact the After-sales service Dept.
LED1 and LED2 on the circuit board is light(blue) Use the diode gear of the multimeter to touch the positive and negative of the LED supply line.	LED light shiny: circuit board damage The LED not light: the circuit board and the LED are damaged	Contact the After-sales service Dept.	
Dimming fault	Adjust the dimming knob, the brightness of the LED is constant, or the brightness of the LED varies only in a darker range	Dimming potentiometer damage or connection line loosening	Contact the After-sales service Dept.
	Observe the LED3 on the circuit board: light shiny(green)	Dimming potentiometer damage or connection line loosening	Contact the After-sales service Dept.
	Observe the LED3 on the circuit board: not light	the circuit board is damaged	Contact the After-sales service Dept.
Colposcope Head Keeps Turning		The damping is not adjusted well or unlocked	Tighten Gross Height Adjustment and locking Knob



### **13 Information about disinfection for Alltion LED Colposcope**

The cleaning of the surface of Colposcope

You can wipe the colposcope with 75% medicinal alcohol on a clean cloth, and you can use the disposable alcohol pads, usually used to clean skin. Care must be taken not to put the alcohol on any lenses, whether that be the lenses the doctor looks through or the lenses towards the patient. Should not use corrosive or scrub cleanser to clean the Colposcope


The cleaning of the surface of Optical Lens

The bloodstain or other dirt on the lens can be cleaned with lens paper or cotton wool that's with distilled water and a little of household detergent. The remaining trace can be cleaned with lens paper or cotton wool that's with 95% alcohol (wipe from centre to outside by spiral slightly). The dust on the lens can be cleaned with blown ballon or whisk pen. Should not use corrosive or scrub cleanser to clean the lens.

The sterilize for the Colposcope

All disinfectant cover can sterilize by pressure sterilizing cooker. Recommend temperature and time as follow:

- (1) Disinfect it for 10 min when the temperature is 120°C
- (2) Disinfect it for 5 min when the temperature is 134°C

 Attention: The dirt on the lens of Colposcope should be cleaned as soon as possible after using the colposcope. Otherwise it will be more difficult to clean when the dirt become hard and dry. You'd better clean and disinfect the colposcope frequently.

### **14 Dispose of Wastes**

The wastes of the colposcope operation are bulb, lens paper and swab. Please do not arbitrarily discard them. Try to use specialized facility for waste treatment if there are some nearby.

Scrapped apparatus should be disposed according local environment law. Please do not pollute the environment.

### **15 Gima Warranty Terms**

The Gima 12-month standard B2B warranty applies.