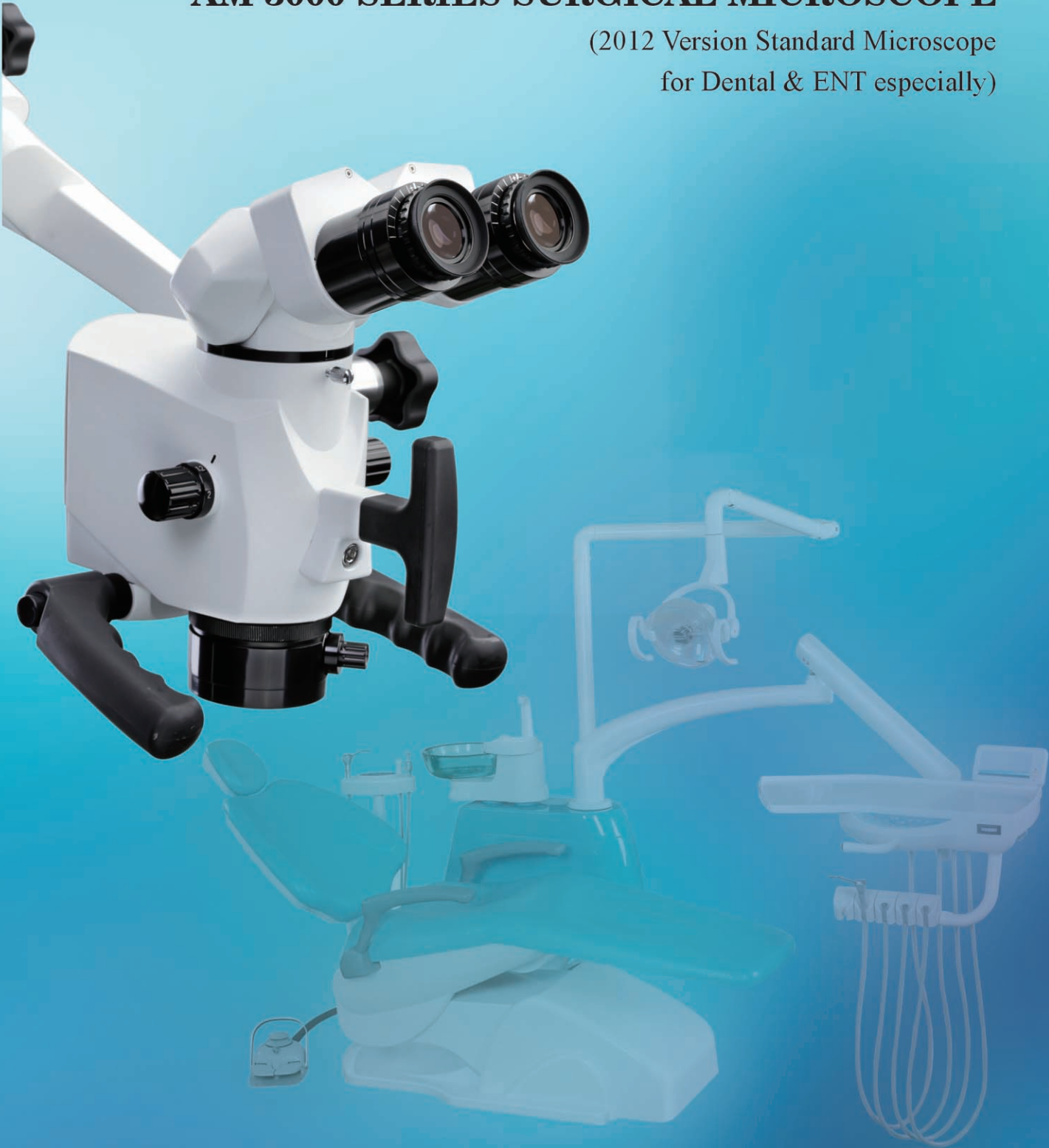


**ALLTION<sup>®</sup>**

## **AM-3000 SERIES SURGICAL MICROSCOPE**

(2012 Version Standard Microscope  
for Dental & ENT especially)



### MODEL: AM-3504

AM-3504 is an ideal surgical microscope for endodontic treatment in day clinics and dental office as well as for multi-surgeries.



### MODEL: AM-3510

AM-3510 is wall mount system surgical microscope



**MODEL: AM-3520**

AM-3520 is fixed ground mount surgical microscope



**MODEL: AM-3506**

AM-3506 is an ideal surgical microscope for ENT (Ear & Nose & Throat) surgery.



## 2012 VERSION:

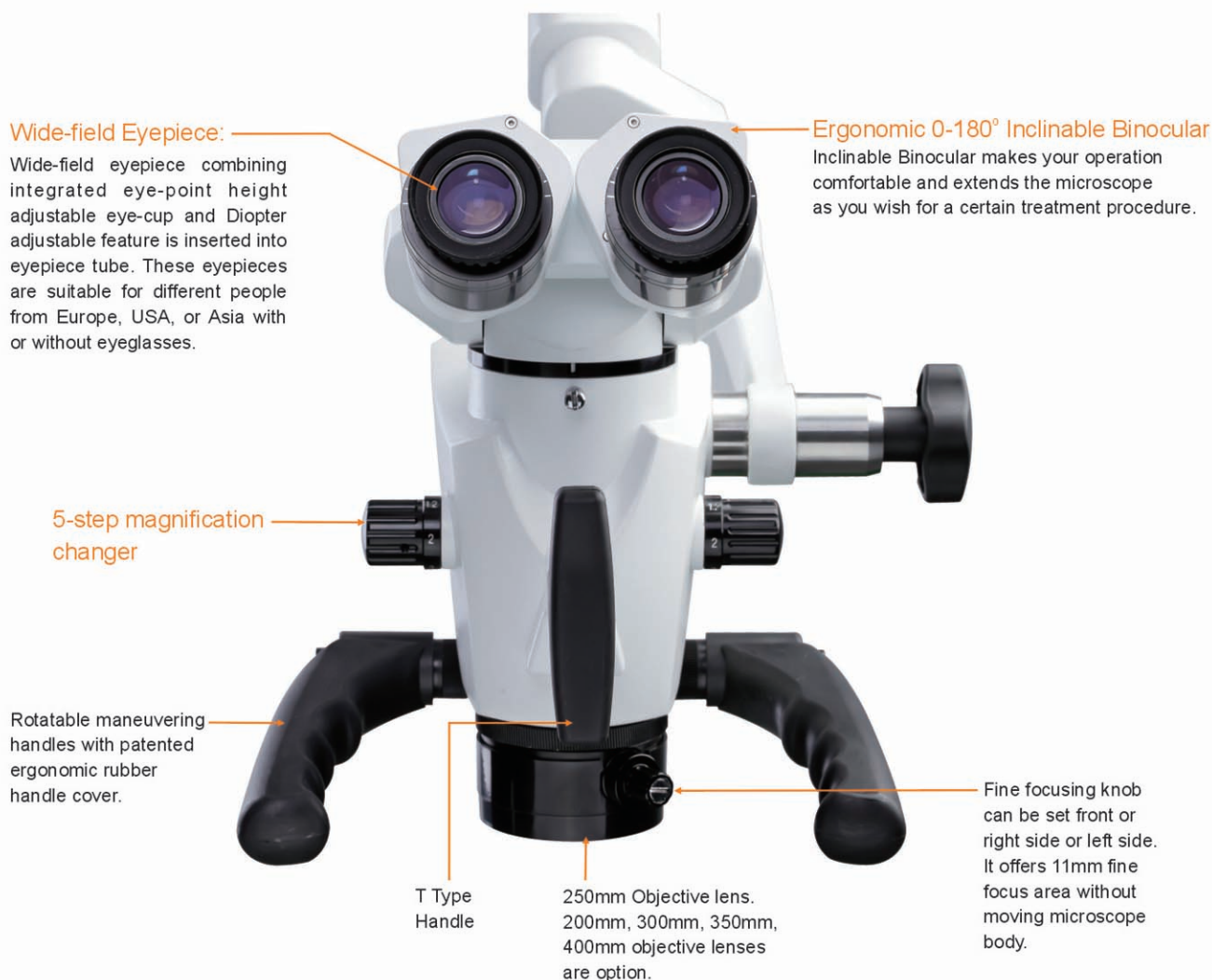
### COMBINATION OF CLASSIC AESTHETICS & MODERN TECHNOLOGY

ALLTION AM-3000 series Surgical Microscopes have been in the dental & ENT market since 2007 and were sold hundreds of units worldwide after that. 2012 version AM-3000 is launched with many upgrades features! The brand-new microscope body with fashionable, dynamic and elegant curves is designed by Mr. Zhang Xun who won following awards:

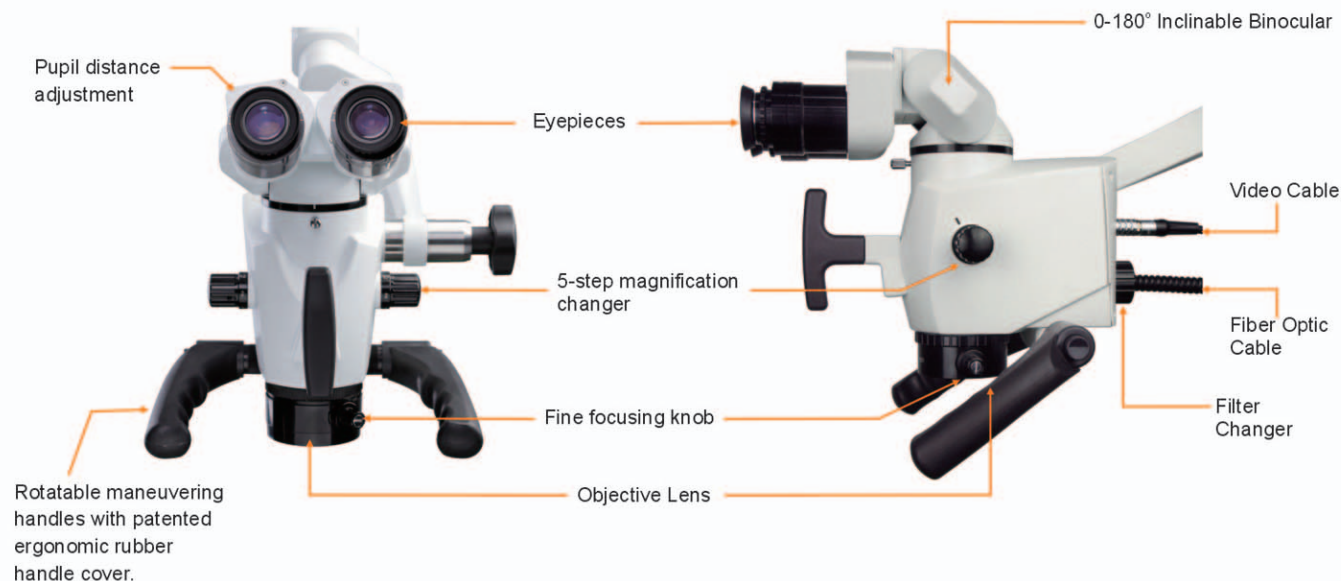
2007 **RED DOT** concept design award: best of best

2008 **RED DOT** concept design award

2009 **IF** product design award gold.







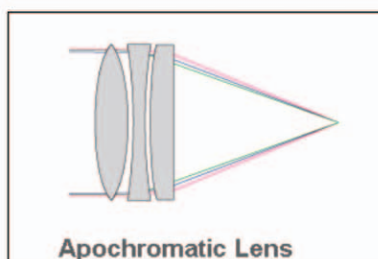
## SUPERB OPTICAL FEATURES



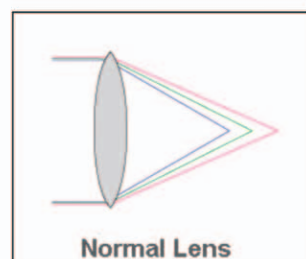
The lenses inside the microscope are made by Schott® Optical Glass imported from Germany. All lenses are multi-coated and anti-reflective, combining with infinity corrected optical system & brilliant apochromatic optics, which offers superb optical performance, including:

1. High resolution
2. Real 3-Dimensional Precise Image Reproduction
3. Large depth of field
4. Wide Field of View
5. Good Contrast

Apochromatic optics design could correct the chromatic aberration of three types of colored light effectively. It ensures the reduction and saturation of image color and improves the resolution, contrast and view depth of image.



Color Aberrations from Visible Lights Are Corrected



Visible Light Refraction Forms Color Aberrations

## 5-STEP MAGNIFICATION

MAGNIFICATIONS OF AM-3000

Objective		F=250mm				
Illumination Area (Diameter)		50mm				
10X Eyepiece	Magnification	2.7x	4.3x	6.8x	11x	17x
	Field Dia. (mm)	64.9	41.6	26	16.3	10.4
12.5X Eyepiece	Magnification	3.4x	5.4x	8.5x	13.6x	21.2x
	Field Dia. (mm)	64.9	41.6	26	16.3	10.4
16X Eyepiece	Magnification	4.4	6.9	10.9	17.4	27.1
	Field Dia. (mm)	51.3	32.9	20.6	12.9	8.2
20X Eyepiece	Total Magnification	5.4	8.6	13.6	21.8	33.9
	Field Dia. (mm)	40.3	25.9	16.2	10.1	6.5



Objectives F=200mm, 300mm, 350mm, 400mm & Their Magnifications Available Upon Request

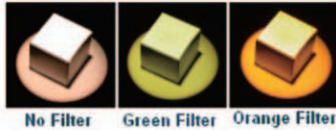
## HALOGEN ILLUMINATION INTEGRATED ORANGE & GREEN FILTER

Two 150W Halogen bulbs with "change on the fly" lamp selector.

- Should a lamp fail during an examination, this feature allows a quick change from one lamp to another resulting in an uninterrupted procedure.

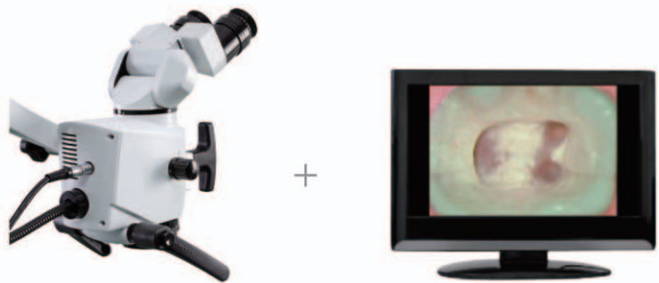
Orange Filter: UV-protection to prevent premature curing of composite

Green Filter: better recognition of blood vessels, e.g. in the root canals.



## INTEGRATED VIDEO CAMERA

An integrated video camera (1 CCD) is available in specific models. It is very convenient for the dentists to communicate with the patient by this device avoiding exterior heavy beam splitter and video adapter and video camera.



The images from integrated video camera can be inputted into a monitor or a TV set directly or into a computer by image collection with USB adapter or stored into a hard disk recorder.



## ERGONOMIC DESIGN & EXCELLENT MANEUVERABILITY FOR LONG TIME PRECISION OPERATION COMFORTABLY

All ergonomic design and excellent maneuverability assure you can work with our microscope for long time precision operation comfortably. It would avoid or reduce your problems on the back and neck.

- Continually Adjustable Eyecup in eyepiece is suitable for you with or without eyeglasses



- Diopter Adjustable of Eyepiece:  $\pm 7D$



- Pupillary distance Adjustable: 50mm to 70mm



- 0—180° inclinable binocular is the standard outfits of most specific models. It allows you to keep good, healthy posture and still observe the patient.



With hanging Counter— balanced pantographic arms design and tension control adjustable connection arms, the optical head can be easily maneuvered at any position and stopped where you wanted in its working range. All maneuvers can be done by one hand with a little force.



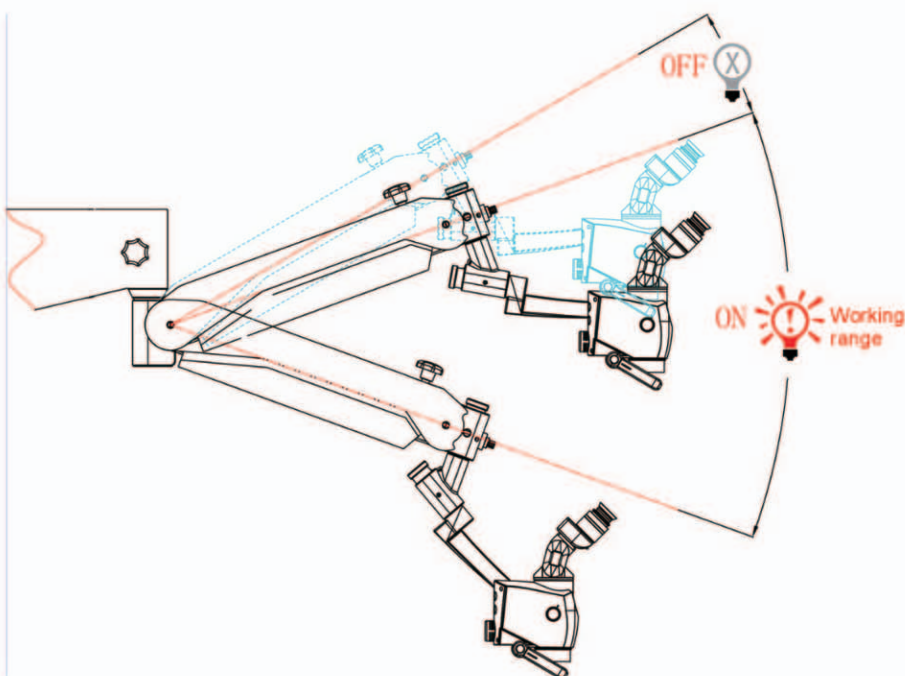
Brightness adjustment knob is just over the optical head. It is very convenient to adjust the brightness.



Built-in orange filter and green filter. You can select the filters by a knob located at the back of optical head.



A special switch is fitted into the arm. The lamp will keep "on" when the optical head moves in the normal working range and the lamp will turn off automatically while the optical head moves out of the normal working range.





## PATENTED RUBBER HANDLE COVER

A pair of patented rubber handle covers is newly set as standard outfits for preventing slipping down and handling comfortably.



The magnifications and field diameters chart is attached to the back of microscopes body which is convenient for the doctors to check the related magnifications and field diameters at any time during observation.



Two handles are added to the column. It is convenient to move the microscopes and hang on the power cable and video cable.



## IMPROVED 120° CONNECTING ARM



Improved 120° connecting arm is provided as standard outfits. It could avoid the risk of dangerous damages to the patient under treatment when the surgical microscopes with accessories fully attached swing down sharply because the locking stoppers loose accidentally. Microscope body can be stopped at  $\pm 60^\circ$  position even if you loose the locking knob fully. It avoids the risk that microscope knocks down to the face of patient.

A brand-new balance arm is offered as option to replace improved 120° connecting arm as final solution.

## MODULAR DESIGN

Modular design not only allows you to interexchange binoculars (straight,  $45^\circ$  fixed,  $0-180^\circ$  inclinable) easily, but also allows you to upgrade your microscope easily with the desired accessories from our plenty of optional accessories at any time if you start off with standard model.



## Ergonomic & function extension accessories

Alltion offers a lot of ergonomic and function extension optional accessories for you to upgrade your microscopes at any time.

1. 350mm Extension Arm can offer extra long reach for your microscope.



350mm extension arm  
or 2500mm video cable  
+ 2500mm Fiber Optic Cable

2. Your microscope can be upgraded with assistant scope

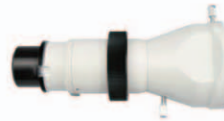


2-D Rotation Binocular  
Assistant Scope



Beam Splitter  
(2:8 or 5:5)

+



2-D Rotation Binocular  
Assistant Scope Connector

+



0-180° Inclined Binocular  
or 45° Inclined Binocular or  
Straight Binocular



3-D Rotation Binocular  
Assistant Scope



Beam Splitter  
(2:8 or 5:5)

+



3-D Rotation Binocular  
Assistant Scope Connector

+



0-180° Inclined Binocular  
or 45° Inclined Binocular or  
Straight Binocular

3. Dual Iris Diaphragm

It can increase the depth of field, especially at highest magnification observation.



4. Laser Barrier Filter Device

It protects the surgeon's eyes against damage while Nd-YAG laser at 1064nm or Er-YAG laser at 2940nm or CO2 laser is used during treatment.



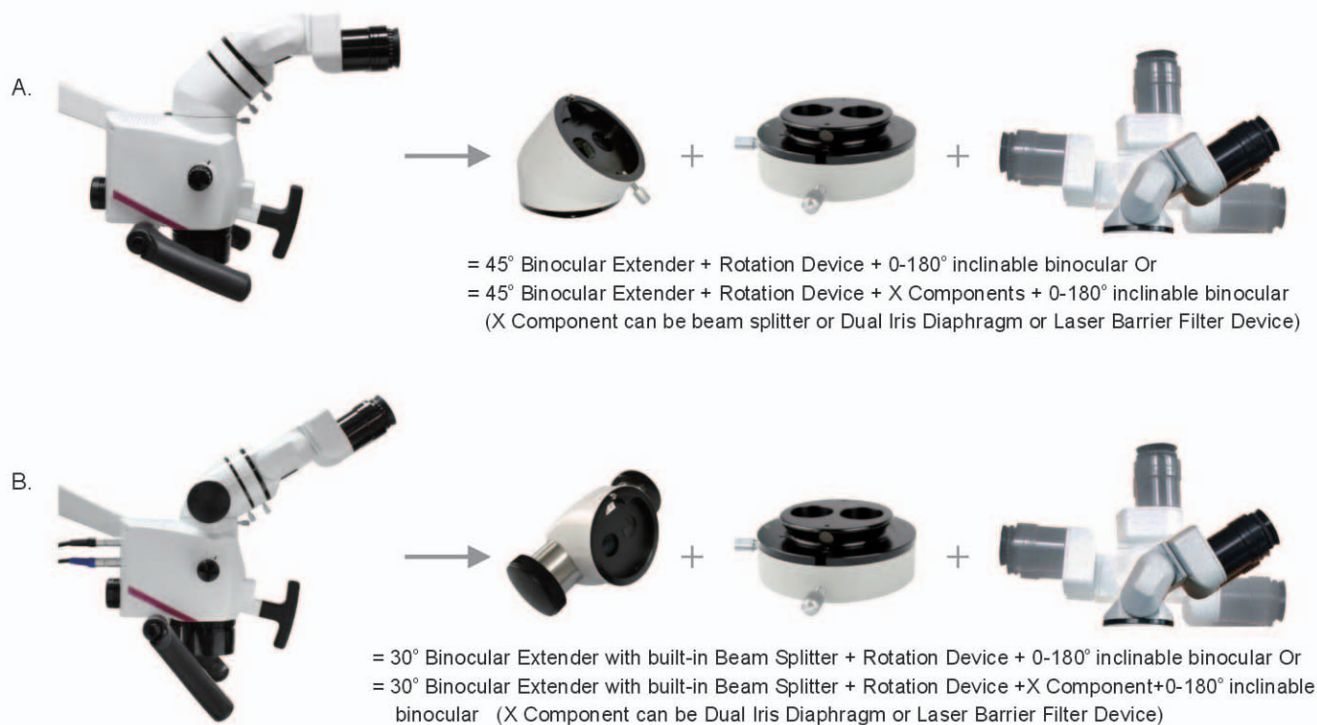
## 5. Pendulum Function by Angle Rotation Device is available.

The angle rotation device can perform pendulum function. It allows operator to remain his natural and straight posture while he is observing the patient with a certain angle. He can change the direction of the optical pod only, while keeping the binocular at its position.



## 6. 45° Binocular Extender & 30° Binocular Extender with built-in Beam Splitter

With this function, the operator's posture is more natural and straight. You are able to maneuver the microscope to a position that allows you to keep good, healthy posture and still observe the patient. This improved posture can eliminate the back and neck pain.



## 7. Eyepieces



10x eyepiece  
12.5x eyepiece

## 8. Objective Lenses



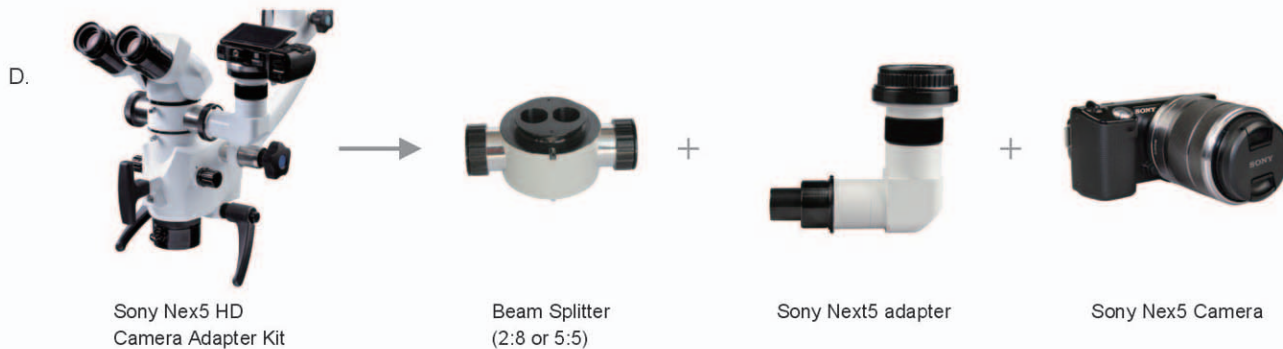
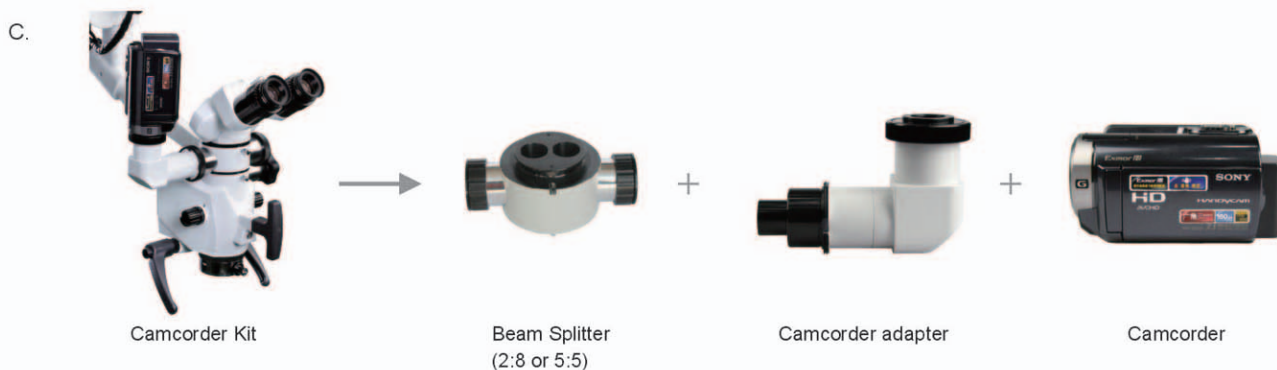
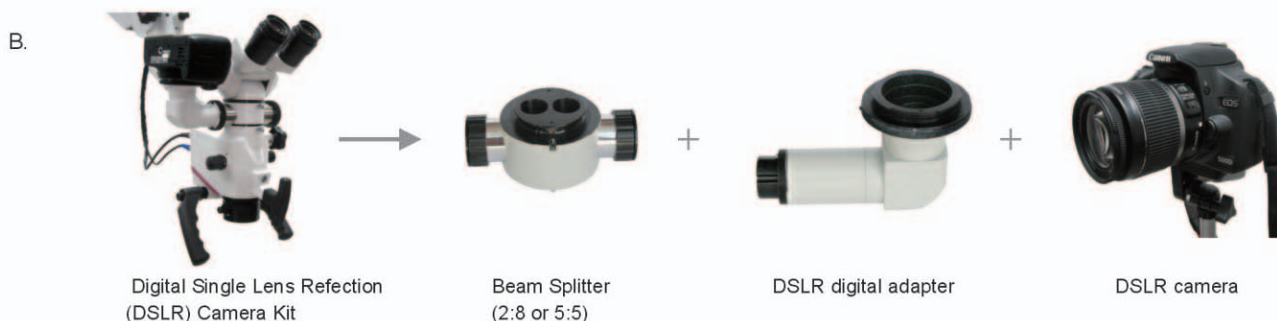
Objective Lens 200mm & 250mm  
with fine focusing feature



Objective Lens 300mm,  
350mm, 400mm

## DOCUMENTATION ACCESSORIES

All Alltion microscopes can be equipped with newly standard photos and video cameras as optional accessories. Please contact Alltion for latest technology whenever you like.



Sony Next HD Camera can take 14 megapixel photos or a 1920x1080i MPEG-4 video can store all into its SD memory card.

E. We would be happy to consider customized camera adapters.

F. As our beam splitter has two ports, you can connect two different cameras to the microscope at the same time.



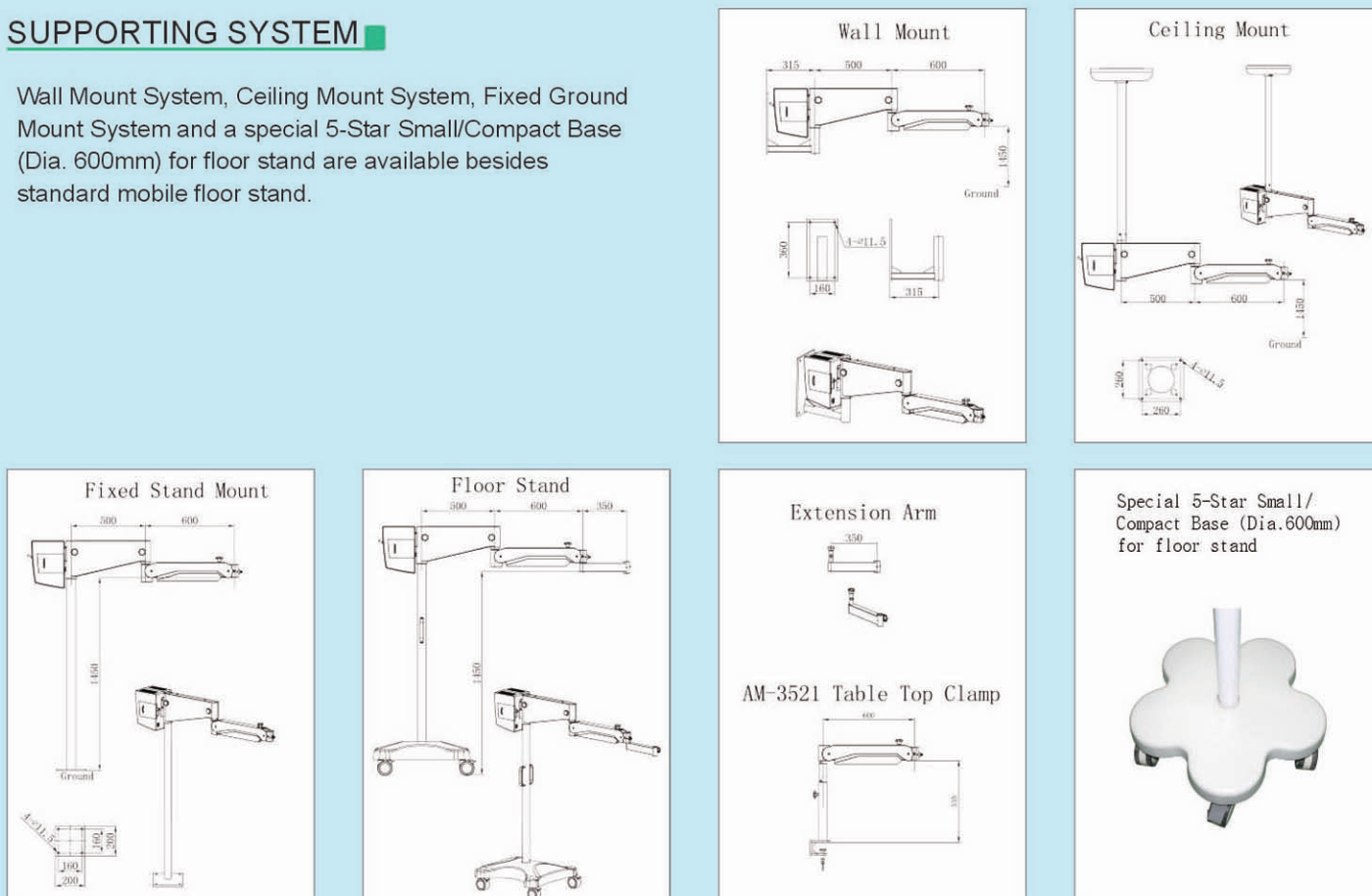


## SPECIFICATIONS

- Either 45° inclined or 0-180° inclinable binocular head for Dental surgery or Straight binocular head for ENT surgery.
- 12.5x/18mm High Eye-point Wide-Field eyepieces
- Range of Pupillary distance: 50mm to 70mm
- Range of the Diopter of Eyepiece: +/- 7D
- 250mm APO-chromatic objective lens with fine focusing adjustment knob
- Magnification: 5-step, Total magnification indicator 0.4=3.44x, 0.6=5.36, 1=8.48x, 1.6=13.6x, 2.5=21.2X
- Diameter of object field: 10.4mm to 64.9mm
- Arms: First big arm, 500mm in length can be rotated 360°. Second small arm, 600mm in length with movement +/-300mm, can be rotated +/-150°. Third angled arm can be 3-D movement.
- Height: 1750mm
- Base size: 610mm x 600mm
- Two 15V/150 Halogen Lamps are manually changeable by a level.
- Maximum Object Illumination: 30,000 Lux Min.
- Built-in Orange filter and Green filter changed by a knob.
- Power supply: 220V/50Hz or 110V/60Hz

## SUPPORTING SYSTEM

Wall Mount System, Ceiling Mount System, Fixed Ground Mount System and a special 5-Star Small/Compact Base (Dia. 600mm) for floor stand are available besides standard mobile floor stand.



Item and specification subject to change, Please contact Alltion for current production information.

CE FDA ISO

**ALLTION®**

Alltion (Guangxi) Instrument Co., Ltd.  
Alltion (Wuzhou) Co., Ltd.

**Microscopes Are Our Business & Service Is Our Pride**

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