



# AM-5000

Surgical Microscope

ryf ag  
**ryf**  
MICROSCOPY  
METROLOGY SERVICES  
+ Spisse made.

**ALLTION**<sup>®</sup>

## Seven Features



Flexible optics rotating assembly (FORA)



Integrated depth of field strengthen device



Fluorescence and white illumination



Built-in 4K camera system



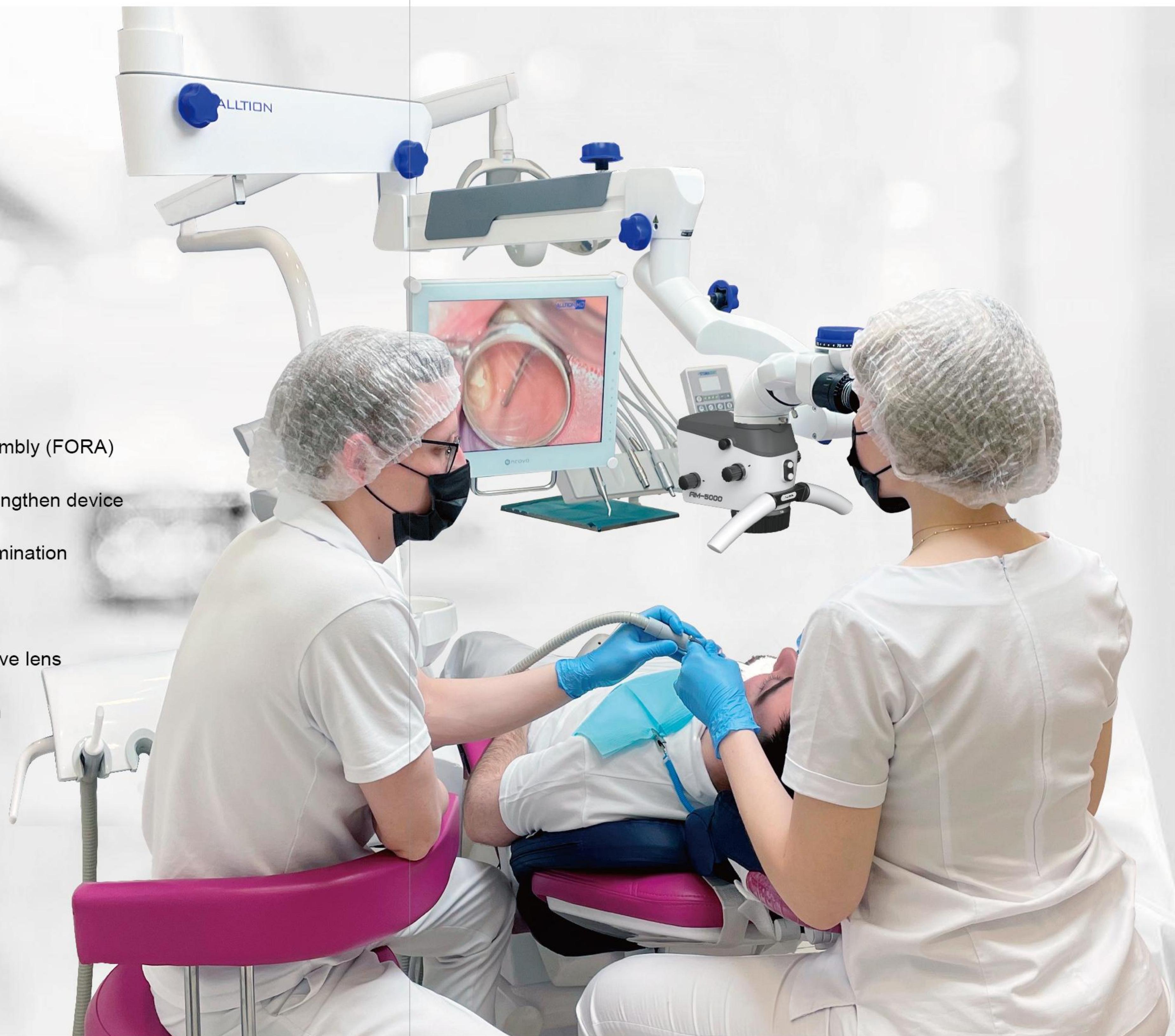
198-455mm Variable objective lens

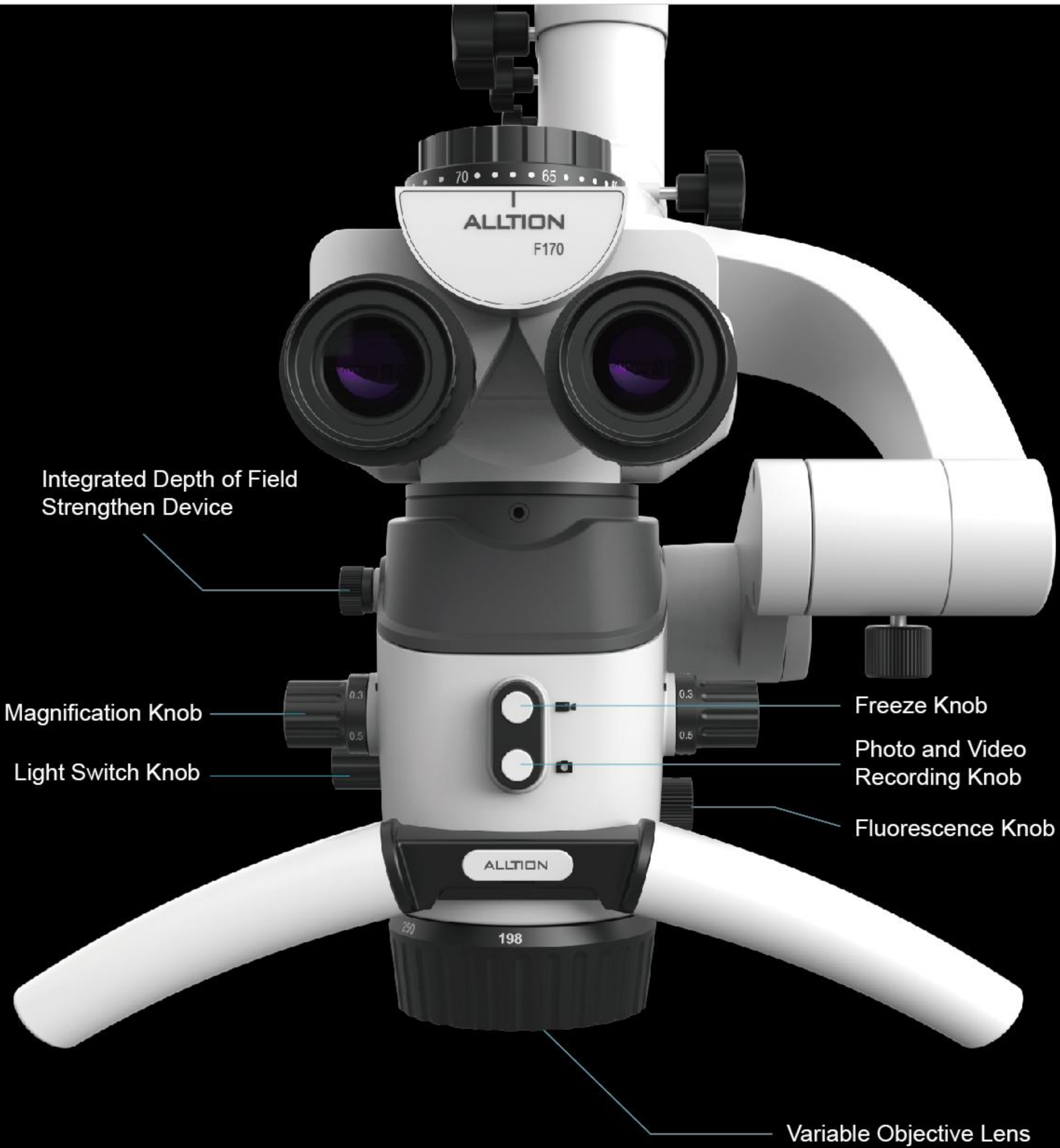


Manual 6-step magnification



Single-handed operation





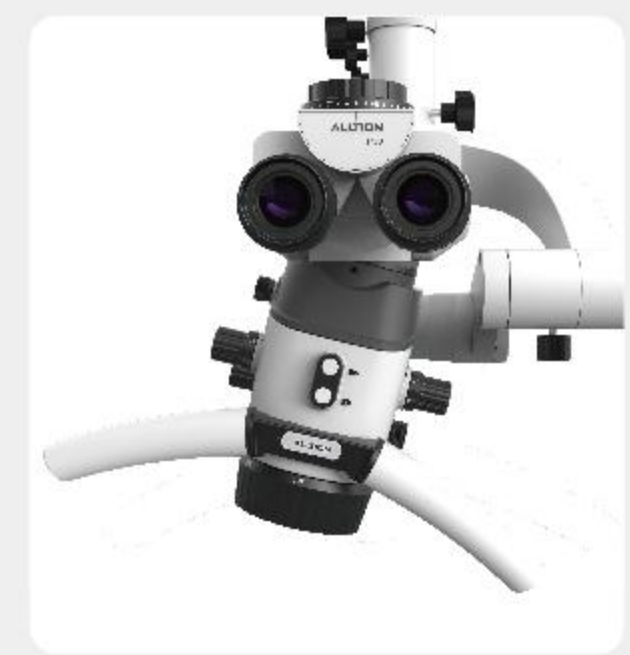
### Single-Handed Operation

Without taking your hand off the handle, the magnification knob, Freeze Knob, Photo and Video Recording Knob and variable objective lens can be operated with your thumb, making it easy to perform common functions with one hand.

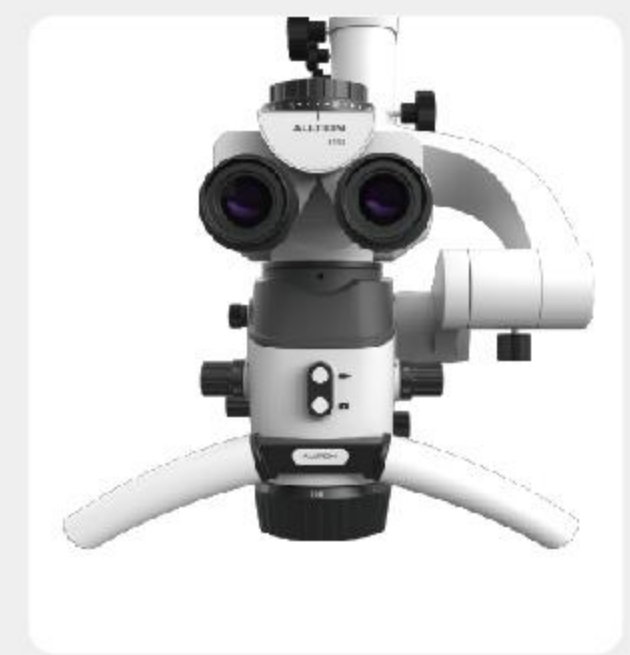


### Flexible Optics Rotating Assembly (FORA) Pendulum Function by FORA Is Available

FORA including 90° binocular extender, pendulum rotation device and beam splitter (2:8/ 5:5) It allows operator to remain his natural and straight posture while he is observing the patient with a certain angle. The operator can change the direction of the optical pod only, while keeping the binocular at its position.



Left inclined set



Vertical set



Right inclined set



## Built-in 4K Camera System



Photograph



Video recording



Freeze



Contrasting photo-photo, photo-live images



Mouse operated



USB storage



Double HDMI channel output



Playback



Built-in WIFI function



Wireless foot control

## Manual 6-Step Magnification

With the 198-455mm variable objective lens, the magnification range is from 1.4X to 22.8X  
1 more step than the conventional 5-step magnification for higher magnification



## Fluorescence and White Illumination

2 modes of illumination, white and fluorescence.

The light switch knob is linked to the anti-violet shield, which is automatically moved into the light path to protect the operators' eyes when switched to fluorescence mode.

Fluorescence mode: aids in the identification of natural tooth tissue and artificial material boundaries. AM-5000 fluorescence mode helps the operators to distinguish the natural hard tooth tissue from the dental composite resin material. This clear visual distinction not only help the operator to quickly target the affected area, but also save operators' valuable chair time during the excavation process.

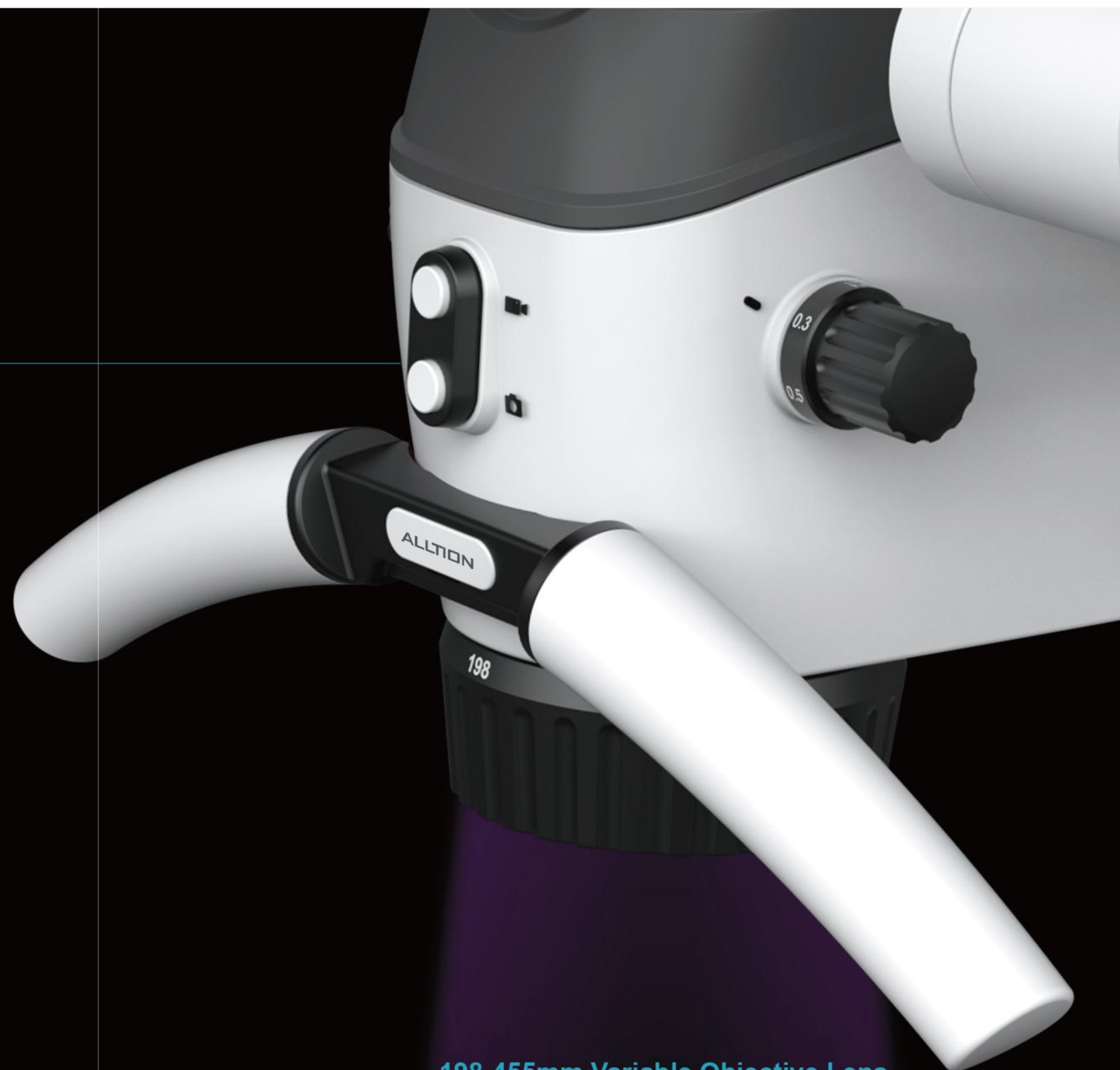
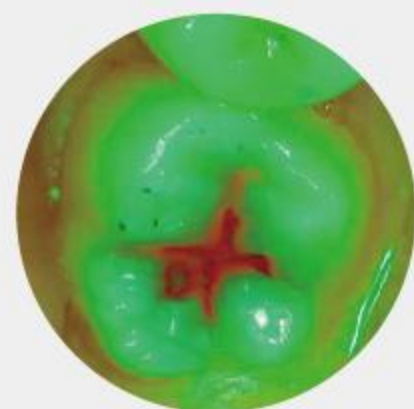
Light switch knob



White light



Fluorescence



## 198-455mm Variable Objective Lens

Super wide working distance: 198-455mm  
Suitable for operators of different heights  
Objective lens 250mm/300mm/400mm for options

## Main Specification of AM-5000 Series Surgical Microscope

Type	Standard	Optional	
Optic	Magnification	Manual 6-step magnification	
	Objective lens	198-455mm Variable objective lens	Objective lens(250mm/300mm/400mm)
	Magnification range	1.4X-22.8X	
	Binocular	0-180°Inclined binocular head with knob of pupillary distance adjustment	45°Binocular/straight binocular
	Range of interpupillary distance	50mm-75mm	
	Eyepiece	12.5X/18mm	10X/21mm
	Glass technology	Premium quality apochromatic technology	
	Diopter	±7D	
	Optical extender		30° Binocular extender+ beam splitter+rotation device; 45°/90°binocular extender with angle rotation device
Illumination	LED	Long-life LED≥50,000 hours	
	Illumination	Illumination up to 80,000lx with a 250mm fixed focus objective	
	Color rendering	≥85%	
	Color Temperature	5500K	
	Light spot	Three types of light spot: maximum/ medium/minimum(without filter) Two types of filter:green/ yellow	
	Fluorescence mode		Fluorescence mode
Power supply	Camera	Built-in 4K camera(see the table below for detailed parameters)	
	Rated Voltage	Input: AC100-240V,50/60 HZ; output: DC12V/3A	
	Input power	25-80VA	
Support system	Floor Stand	Fixed floor stand/floor stand with 950 pantograph arm/ceiling mount/low position wall mount/ high position wall mount/ table mount/table clamp mount	

## Specification of Built-in 4K Camera

Senor	1/1.8" SONY 8 million pixel high-performance, high sensitivity and low-noise CMOS
Interface	HDMI 2.0 1pc/ USB 2.0 1pc (for mouse)/USB 3.0 1pc (for connect USB flash disk)/ 3.5 audio interface 1pc (for sound recording)
Resolution	4K (3840*2160) 60FPS (16:9)
Storage	Connect external USB flash disk (support FAT32 and NTFS formats); picture: JPG format; video: MP4 format
WIFI	Built-in WIFI function, it can transmit images
Optical data	Camera split ratio: 2:8; beam split ration: 2:8 (5:5 for option)
Video resolution	4K 30FPS, 1080P 30FPS
Picture resolution	8M (3840*2160), 2M (1920*1080)
Basic functions	Freeze, photograph, video recording, automatic exposure, white balance, play back and cross curve, sound recording
Image effect	Exposure value, best brightness, gain, red gain, blue gain, saturability, contrast ratio, definition and HDR
Advanced functions	Horizontal flip, vertical flip, zoom out, zoom in, AOI and image comparison
System settings	Automatic/autonomous naming, show/hide time, show/hide LOGO, eleven languages for option (Chinese, English, German, French, Spanish, Italian, Portuguese, Swedish, Japanese, Russian, Polish), image resolution, naming setting, system update, restore default, version information

## Optional Accessories



0-180° Inclinable binocular



45° Inclinable binocular



Straight binocular



FORA (Flexible optics rotating assembly)



ALL-CAM 4  
(4K camera system)



ALL-CAM2  
(2K camera system)



30° Binocular extender +  
beam splitter + rotation device



Mobile phone adapter



90° Binocular extender  
+ rotation device



45° Binocular extender



30° Binocular extender  
+ rotation device



Face-to-face with  
stereo bridge



2:8/ 5:5 Beam splitter



Laser protecting filter



Angle rotation device



Depth of field strengthen  
device



198-455mm Variable  
objective lens



250-430mm Variable  
objective lens



200-310mm Variable  
objective lens



10X/21mm; 12.5X/18mm  
Eyepiece

## Optional Outfits



SLR camera adapter



F180/ F340 Camera  
adapter



DSLR Camera



2D assistant scope



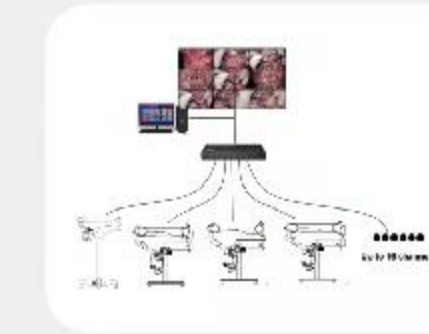
3D assistant scope



Wireless transfer kit



HDMI capture card



Interaction system between  
teaching & learning of  
surgical microscope



Monitor



Monitor bracket



Wireless foot pedal



Objective lens splash guard



Sterilization cover



Endontic Simulator

## Optional Outfits



Face-to-face with stereo bridge kit



Face-to-face with stereo bridge

+



0-180°Inclinable binocular



2D Rotation binocular assistant scope kit



Beam splitter (2:8/5:5)

+



2D assistant scope

+



0-180°Inclinable binocular



3D Rotation binocular assistant scope kit



30° Binocular extender+ beam splitter+ rotation device

+



3D assistant scope

+



0-180°Inclinable binocular



Mobile phone adapter kit



30° Binocular extender+ beam splitter+ rotation device

+



Mobile phone adapter

+



Mobile phone



DSLR Camera adapter kit



30° Binocular extender+ beam splitter+ rotation device

+



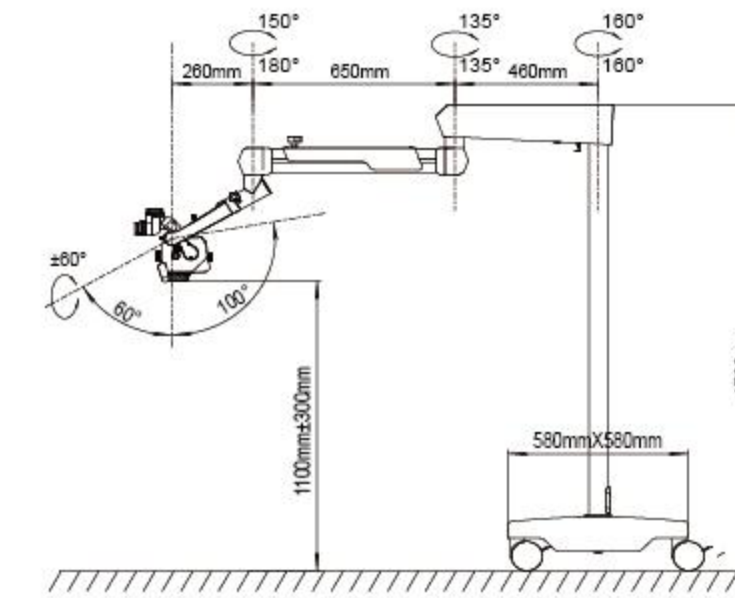
DSLR Camera adapter

+

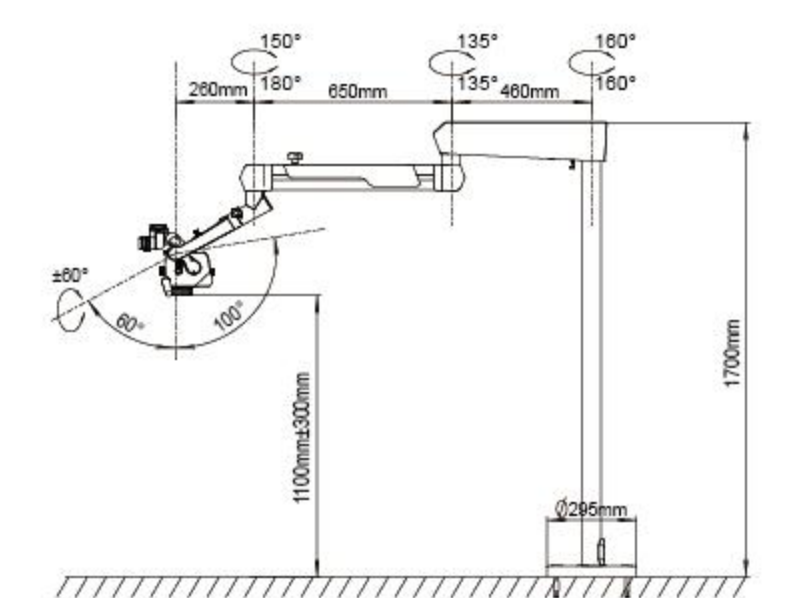


DSLR Camera

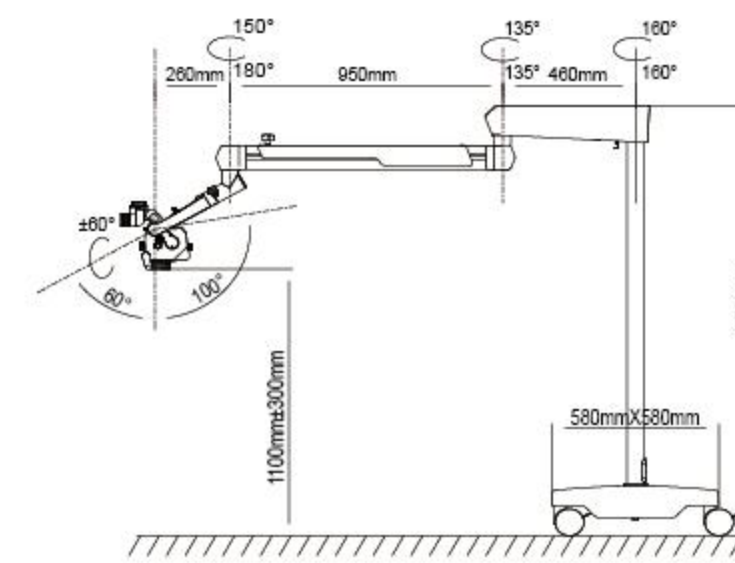
## Figure of Support System of AM-5000



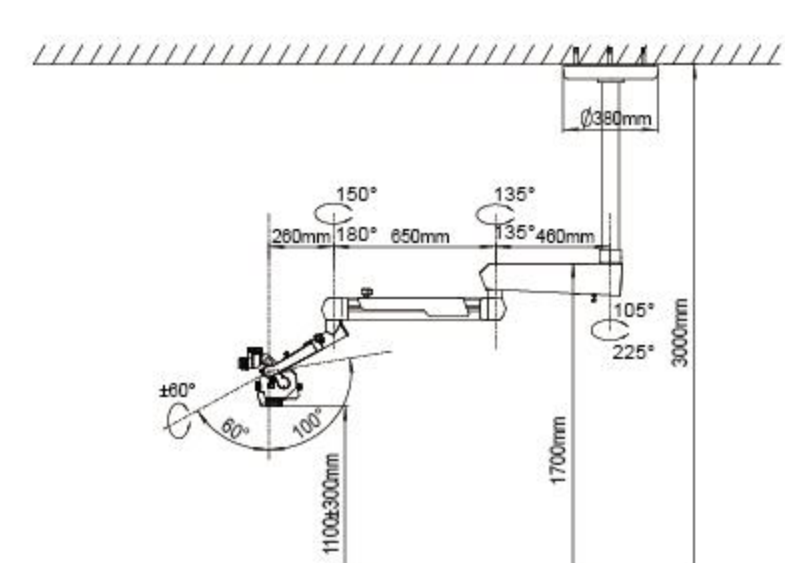
Floor stand



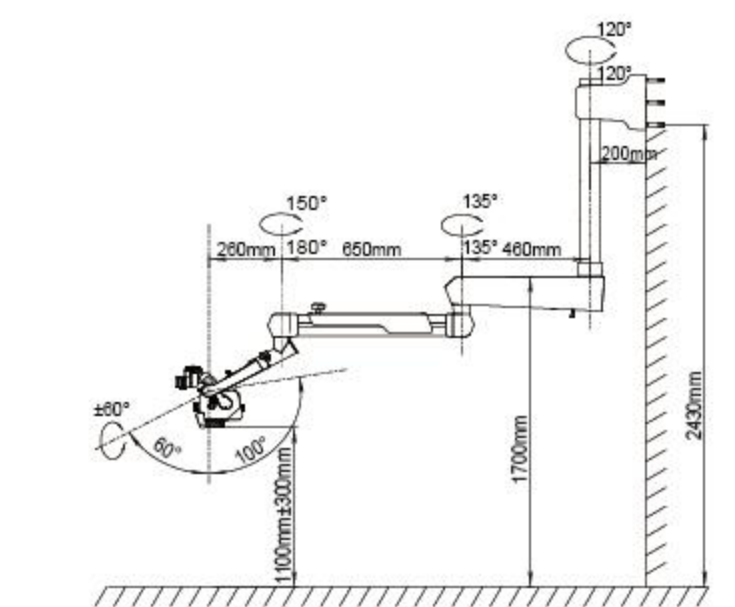
Fixed floor stand



Floor stand with 950 pantograph arm



Ceiling mount



High position wall mount

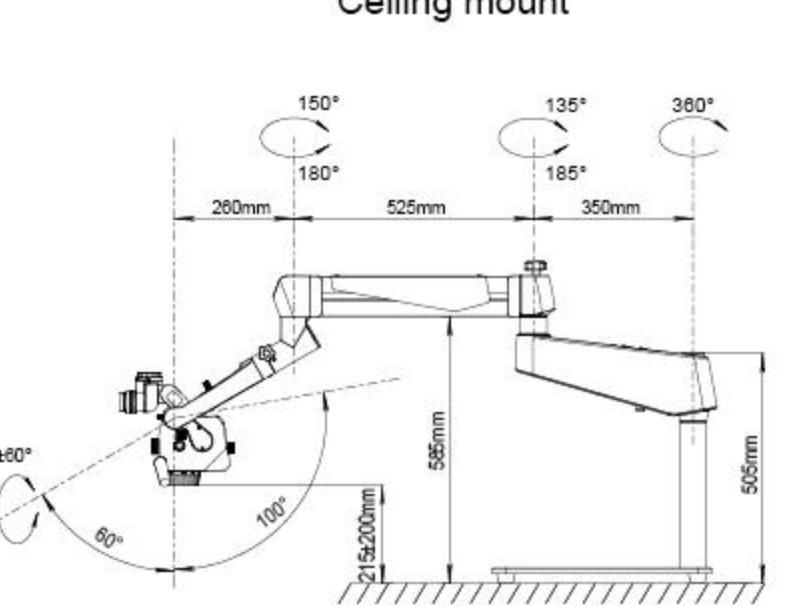
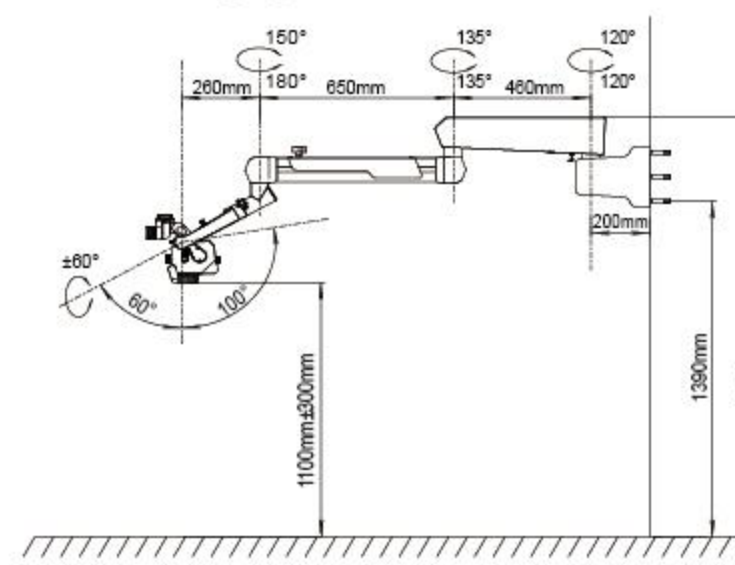


Table mount



Low position wall mount

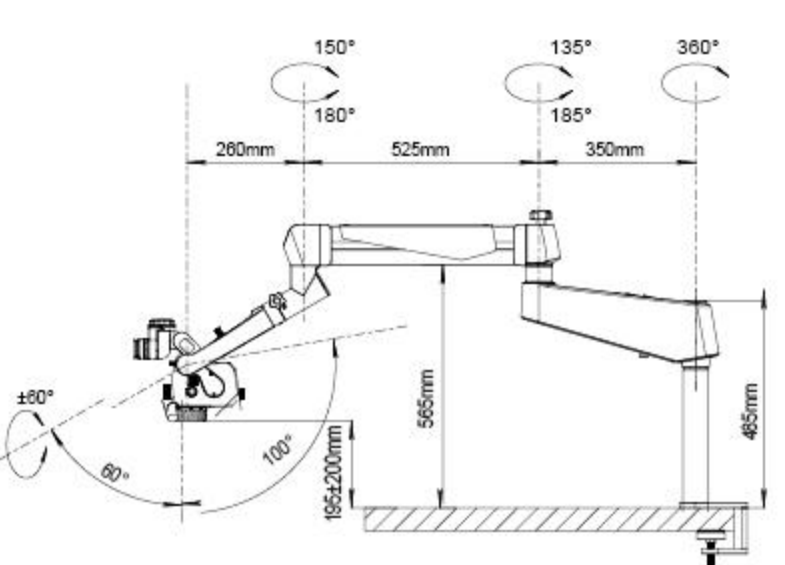


Table clamp mount