

# Who we are?



Microscope products manufacture & supplier

Microscope solution provider

Olympus third party supplier

Self-owned brand MshOt



# What we are doing?

#### MshOt明美

Looking for distriutors

Offering microscope and accessories

Accept OEM & ODM service

# Who are our customers?

#### MshOt明美











- Institutes of bio-science and life sicence
- University lab and school
- Scienctific research center
- Hospital and clinical center
- Medical industry company
- Reagent manufacture
- Microscope dealer































# Company background



- Founded in 2003, MICRO-SHOT is headquartered in Guangzhou City China. It has
  establisehd brand MSHOT, focusing on the R&D and sales of optical microscope and
  imaging products, and is committed to the localization of research grade
  microscopes and important components.
- At present, in terms of research-level microscope and digital imaging product development and technical reserve, MSHOT is in the forefront of China's peers, representing the leading level of China's micro imaging industrialization.





#### Identity

Micro-imaging system solution provider

#### Vision

To be leader of China's micropic imaging industry

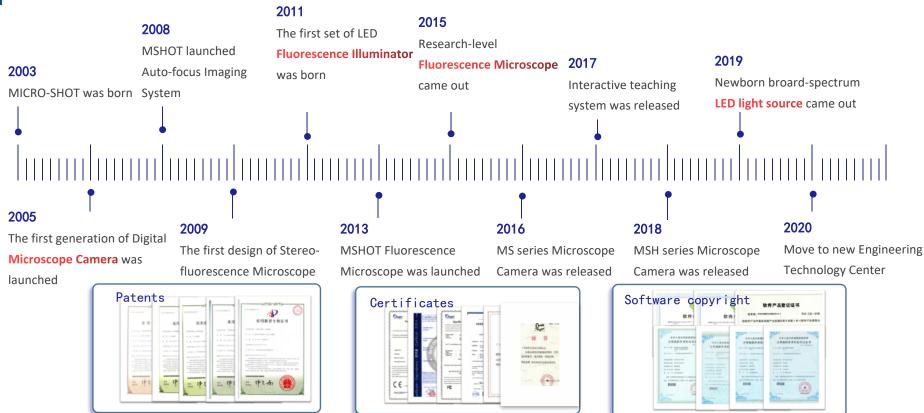
#### Core value

Integrity Innovation Cooperation Serivce

#### Mission

Maximize value of solutions and service

## Development: 18 years



# Qualification Honor













# MSHOT Surrounding









Factory - 2th floor

Technical center

Head office

Reception













# MSHOT Activities

#### Msh⊕t明美















We attend 15~20 exhibitons and conference evey year.

# Products line





**Biological microscopes** 

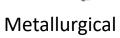


Fluorescence microscopes















Camera

Light source

Attachments



# Hot sale models

### Biological microscopes / Upright type



ML10 Trinocular



ML11 Trinocular



ML31 Trinocular



ML11 Binocular



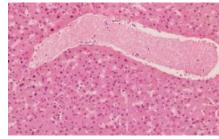
All of trinocular microscopes can add camera

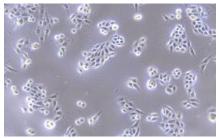


# Biological microscopes / Inverted type









Bright field

Phase contrast

MI52-N inverted biological microscope with phase contrast

### Fluorescence microscope / Upright type



MF31 Fluorescence microscope
Common use



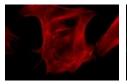
Single color

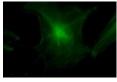
Two/Three colors

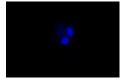
MF31 Fluorescence microscope Scientific grade

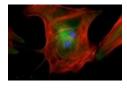


Fluorescence observation

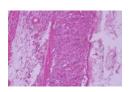








Bright field observation



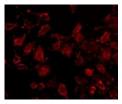
# Fluorescence microscope / Inverted type

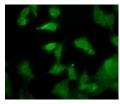


MF52-N Fluorescence microscope Common use



Fluorescence observation



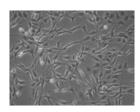




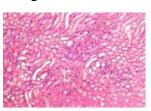
MF523-N Fluorescence microscope Scientific grade



Phase contrast observation



Bright field observation



# 9

### Stereo-Fluorescence microscope

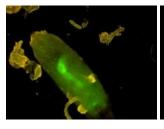


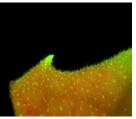
MZX80 Stereo-Fluorescence microscope Entry level

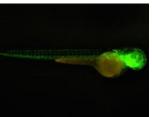


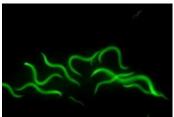
MZX81 Stereo- Fluorescence microscope Scientific grade













# Metallurgical microscope Upright & Inverted type





MJ31 Metallurgical microscope Common use



Bright field observation



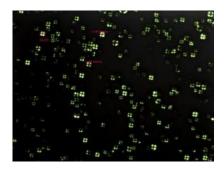
Equipment with simple polarizing function

# Polarizing microscope



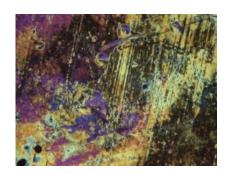


ML31-P Simple level





MP41 Professional level



# Stereo microscope - 3D performance





MZ62 Stereo microscope Zoom 6.7X~45X



MZ101 Stereo microscope Zoom 7X~63X









### Microscope cameras





MD30 USB2.0 1/2" 3MP



MD50 USB2.0 1/2.5" 5MP



MS60 USB3.0 1/1.8" 6.3MP



MSX1 USB3.0 1/1.7" 10.0MP



MS23 USB3.0 1/1.2" 2.3MP



MC50-S USB3.0 2/3" 5.0MP



MSX11 USB3.0 4/3" 21.0MP



MSX11-C Cooling USB3.0 4/3" 21.0MP



MD26-HD HDMI &USB2.0 1080P 5MP



MD80-HD HDMI 4K 8MP



MD80-W WIFI & USB 4K 8MP



MD28-W USB & WIF 1080P 16MP Windows 10

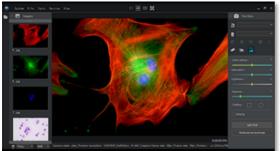


# **MSHOT Imaging Software**

#### Software - MSHOT Digital Imaging Analysis System



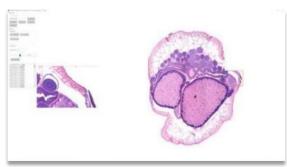






Bright field Fluorescence Measurement

Auto image splicing





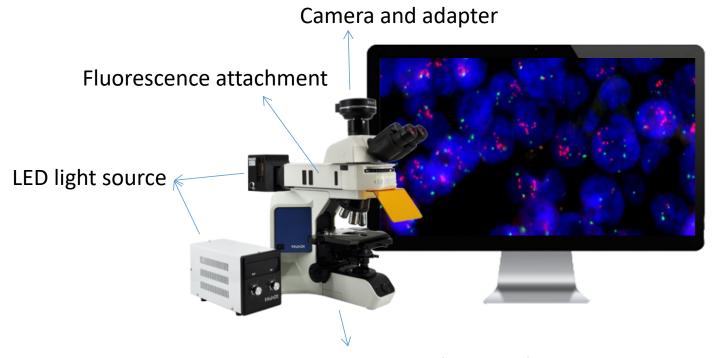
Auto EDF Extend depth of field



# Advanced Microscopes & Technology

# Research-level Upright Fluorescence Microscope MF43-N

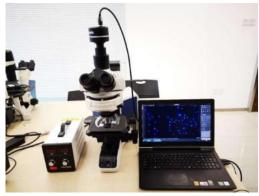


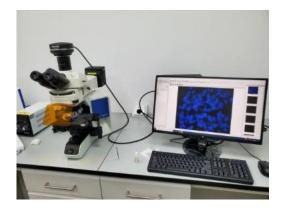


Host is equivalent to Olympus BX43

### MF43-N Cases







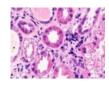


# Suitable for different observation method Bright field and fluorescence

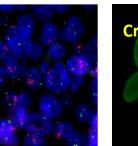
#### MshOt明美

Bright field

With low power and high quality U-AC condesor, it can meet the continuous observation of 4x to 100x (oil mirror), higher resolution and better flat field performance can be obtained at all magnification.



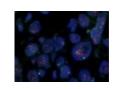




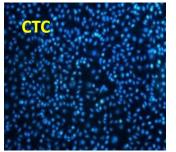


Fluorescence

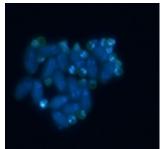
The design of 6-hole turntable fluorescent module, which can replace the excitation block independently, has a wide range of applications and high signal-to-noise ratio. It is suitable for FISH / CTC / cryptosporidium / immunofluorescence and other fluorescence fields.







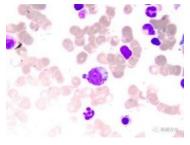
**FISH** 



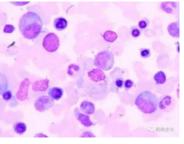
### MF43-N Warm light LED lamp Bright field illuminator

Upgrade the color temperature of light source, add double convex mirror and frosted glass, retain the original circuit control.

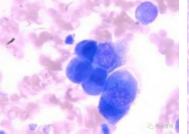




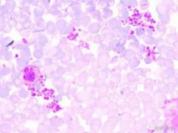
Toxic granules



Gaucher's disease



Metastatic carcinoma of bone marrow



Polycythemia vera

### Broad-spectrum high power LED light source

### —Alternative mercury lamp





- · Replace the traditional mercury lamp light source.
- · It can be used in fluorescence microscope to overcome the shortcoming of narrow spectrum of single LED light source.

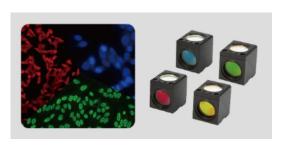




Advantages of LED light source LED has become a new light source for lighting and display in the 21st century.

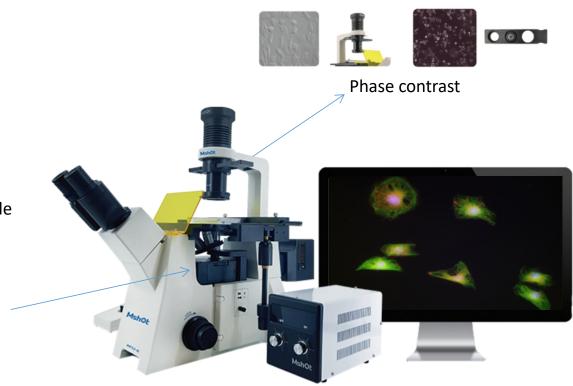
# Research-level Inverted Fluorescence Microscope MF53-N

#### MshOt明美

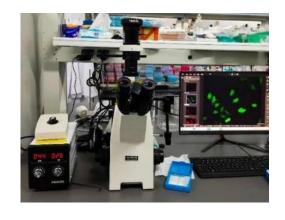


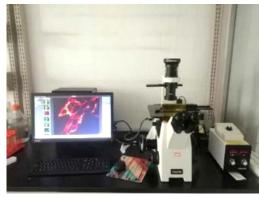
5 cubes/6 cubes fluorescence module





### MF43-N Cases







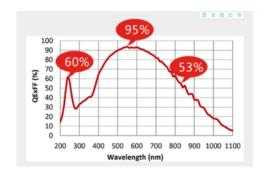


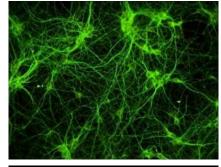
# Advanced Cameras & Technology

# Back illuminated SCMOS Camera MSH12













Effective resolution 4.2 megaxpiels 1.2 inch sensor



Peltier cooling, coolded to 15 °C at room temperature

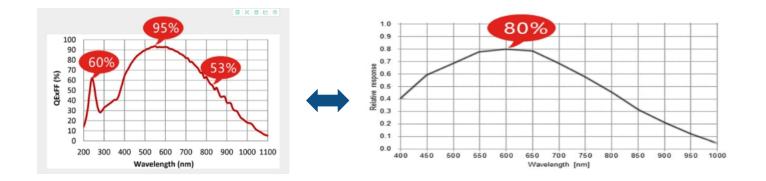


Fluorescence imaging Spectral imaging



# Back illuminated SCMOS Camera MSH12 Quantum efficiency





- Quantum efficiency is the probability of photons converted into photoelectrons at a certain wavelength, which is related to the wavelength.
- The quantum efficiency of MSH12-BI has been greatly improved, and the quantum efficiency has reached an unprecedented 95% at 560nm.



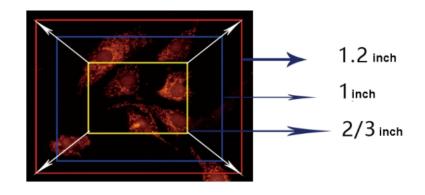
#### Back illuminated SCMOS Camera MSH12

#### Large size sensor



#### 1.2 inch provides wider field of view

The 1.2 inch large chip has larger photosensitive area and better imaging effect, which brings a larger field of vision for the observer and provides a more direct full field observation effect.

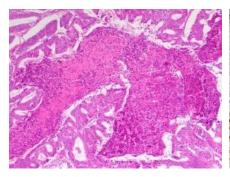


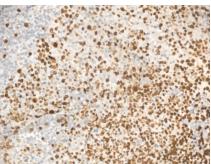
# High resolution & high sensitivity camera MSX11/MSX11-C

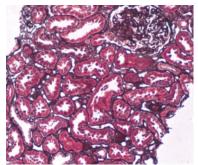


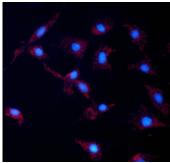


- 21.0 Megapixels
- 4/3 inch sensor
- Superior for fluorescence imaging
- Built in hardware ISP image processing chip
- Excellent detail processing and color reproduction
- Efficient data processing, up to 21fps at full resolution
- · Cooling -15°C for more pure image and reduce noise











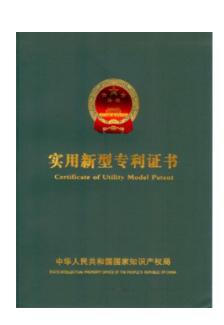
# Advanced Attachments & Technology

# Thermal plate—Patent product









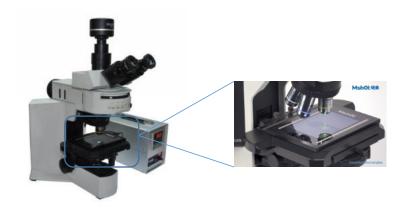
Unique / independent R & D in China

#### Transparent heating stage & thermal plate TP-M

#### Msh⊕比明美

#### Features:

- · 0.5mm/0.7mm ultra thin design
- $\cdot$  Room temperature 50 °C ( $\pm$  0.3 °C precision)
- · Heating speed can be controlled to meet your personalized experimental needs





Used to heat culture dishes / slides to keep object at stable templerature.

Transgene experiment reported by China **Central Television** 

# Transparent thermal plate-TP-M

### Msh⊕t明美















# Featured Illuminators & Technology

#### **LED Fluorescence Illuminators**



- Used to upgrade all types of inifite optical system microscope to fluorescence function
- MSHOT is the first microscope manufacturer in China to make fluorescence module



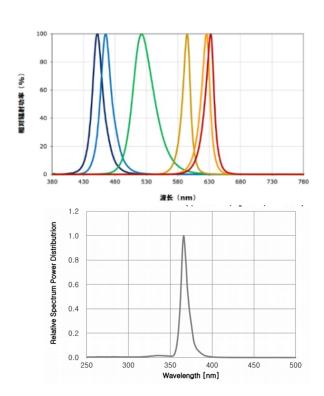








Model	LED lamp		Filter wavelength	Recommend Application	
		Excitation	Dichroic mirror	Emission	
В	Blue	475/40nm	>500nm	535/45nm	GFP / FITC /EGFP/ Malaria diagnostic/ Alexa 488 / Cy2@ / Fluo-4 / FluorX@ / Fluoro-Jade
RB	Royal blue	420-480nm	>500nm	510nmLP	Tuberculosis Diagnostic
G	Green	525/45nm	>560nm	595/60nm	PI / EB / EH
	Yellow	560/40nm	>600nm	610nmLP	mCherry / Texas Red / AlexaFluor 594
U	UV	330-380nm	>400nm	420nmLP	DAPI / Hoechst 33342&33258 / AMCA/AMCA-X / Alexa 350



### LED Fluorescence Illuminator MF-LED

#### Msh⊕t明美

- For upright biological microscope upgrade to fluorescence
- Single color model / Multi-colors model
- 330nm~580nm is optional





Single color model



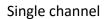
Multi-colors model

#### Plug-in type LED Fluorescence Illuminator MF-LED-CX43

#### MshOt明美

- Special for Olympus CX43 and CX33
- Single channel
- Dual channels
- Reflected white lighting







**Dual channels** 



Plug-in



Reflected white lighting

### LED Fluorescence Illuminator MI-LED



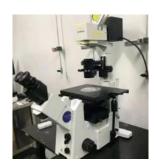
- For Olympus inverted microscope upgrade to fluorescence
- BGU 330nm~580nm is optional











CKX41 CKX53 IX73 IX71

#### LED Fluorescence Illuminator MZX-LED

#### Msh⊕t明美

- For infinite optical system stereo microscope upgrade to fluorescence
- BGU 380nm~580nm is optional



Olympus



Nikon



Leica

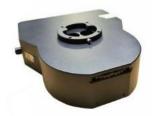


Zeiss





**Dual channels** 



**BGU** chanels

#### Broad-spectrum LED light source MG100 MG30

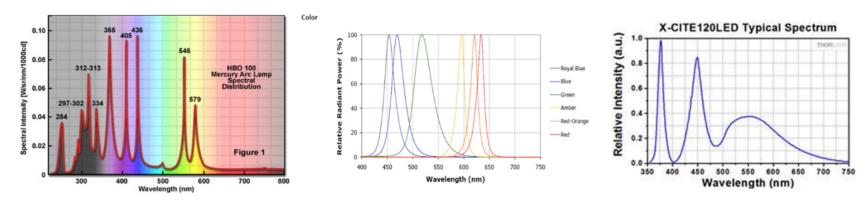


- MG100: 100W LED lamp lighting for fluorescence microscope
- MG30: 30W LED lamp for reflected white lighting
- Continous BGU excitation wavelength covers 330nm~750nm
- Universal works for Olympus Nikon Leica Zeiss









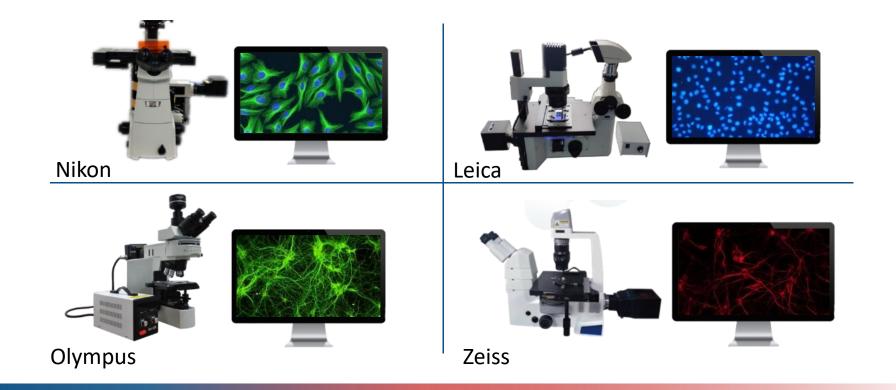
Traditional mercury lamp

Monochromatic LED light source

Broad spectrum

# Broad-spectrum LED light source works with different brands of microscope







What we are doing for future?

## Piezoelectric ceramic motorized stage

#### Msh⊕比明美

#### Features:

- · Realization of motorized XYZ positioning of microscope samples
- · High speed, high precision (nano scale) scanning
- · It can be combined with Nikon, Olympus, Zeiss and MSHOT
- · Accept customized products of different sizes

#### Application area:

High precision positioning and scanning experiment, customization and integration of automatic microscope system





# Digital display LED fluorescence illuminator Remeber light intensity





For inverted microscope



For upright microscope



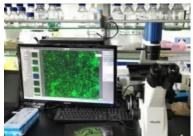
# Sucessful projects samples

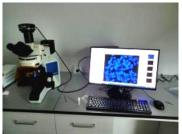
# MshOt明美

























Why we are good supplier

#### **MSHOT Culture**

Creative Honesty Cooperated

MSHOT Target

To be leader of chinese microscope brand

# Product quality



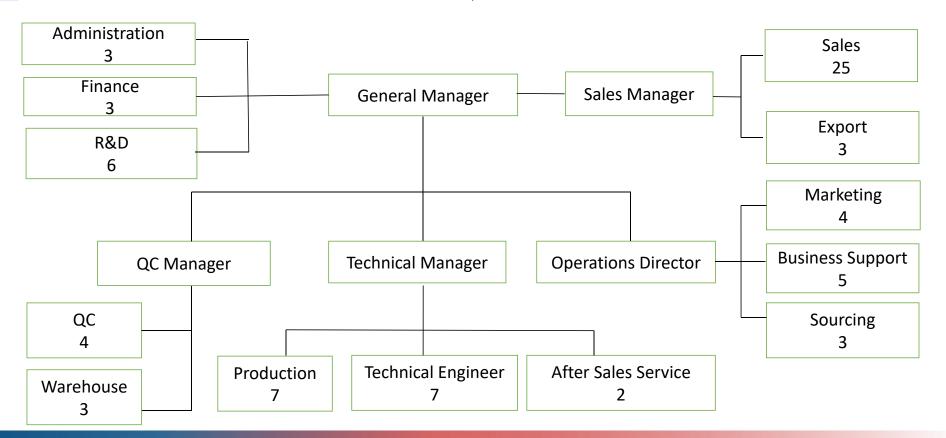


Quality first!

# Professional Team

80 people
All are university or college graduated
2 Doctor, 5 Master

MshOt明美



## Keep investment and development

#### MshOt明美













2021 Planning to expand factory area, employees get to 80 staff

2020 Developed Technical Center

2019 Expand production line and warehouse 3 times bigger, 600ന്

2017 Buy and move to new office and warehouse, employees get to 50 staff

## Production system







ISO system

**ERP** progress

### Medical instrument authorization





Chinese Medical Instrument Manufacture Certificate

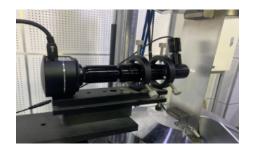
# R&D and customize ability

Mechanical desgin, machine vision, medical instrument, optical design, software









fluorescent mirror sider at the factory it required, the optional COXAVI mirror for U-excitation can be mounted in the open position or by inhowing the B- or G-excitation mirror. Work to be done by the dealed

#### Dunmanent minns specifications

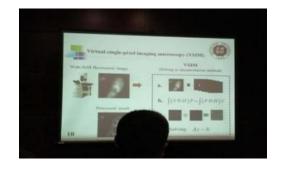
Excitation	Plycrescent Minor	Cichroic Mirror	Excitation Filter	Barrier Filter	Applications
В	_	DM500	BP460-490C	BA520 F	FITC: Pluorescent antibody method     Acidne crange: DNA, RNA     Auramine: Tuborcio bacillus     EGFP, 965T, RSGFP
G	-	DM570	8P480-650C	BAS90	Rhodamine, TRITC: Pluorescent anti- body method     Propidlum lodide: DNA     REP
υ	CKX+NU	DM400	BP330-385	BA420	Auto-Buorescence observation     DAPL DNA     Hoechest 30258, 33342: Chromosome

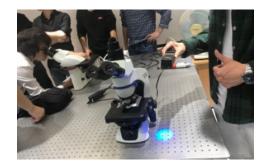




# Staff training Train every two weeks

### Msh⊕t明美













# Product quality inspection process

#### Msh⊕t明美



Burn-in test



Package shock checking



Production lable



Illumination intensity



Performance checking



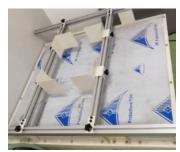
Defective products

# Product quality inspection instruments





Vacuum drying oven



Vibration tester



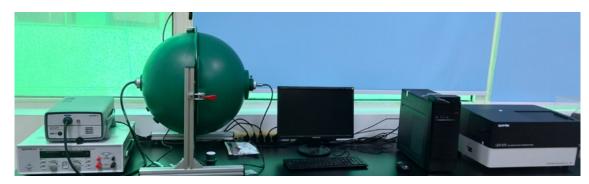
Constant current source



Constant temperature and humidity box

## Material quality inspection instrument





Integrating sphere

Increase incoming material inspection and quality control, all lamp beads, lens incoming basically maintain full inspection, screening out qualified product batches.

# Package

#### Msh⊕t明美



Light-proof inner



**Explosion proof** 



Elegant box



Alluminum suitcase



Polypropylene protect



Carboard carton

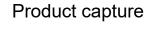
# Marketing support & sales material







**English Catalogue** 



Google Advertising



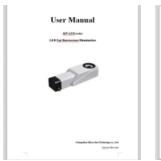




English website Youtube Exhibition

# Sales support

#### Msh⊕t明美





How to operate polarizing microscope MP41 with ca...



MF31-LED epi fluorescence microscope with MS60 sC...





English User manual

Videos

Online support



Customer service



Technician support



At site service



# THANKS!

— Guangzhou Micro-shot Technology Co., Ltd — www. m-shot. com sales@mshot. com



