KEN-A-VISION T-22041 Vision Scope 2 Stereo Microscope

KEN-A-VISION T-22041 Vision Scope 2 Stereo Microscope Instruction Manual

Contents

KEN-A-VISION T-22041 Vision Scope 2 Stereo Microscope

Specifications

- **Product Name:** Vision Scope 2 Stereo Microscope
- **Model**: T-22XXX Series T-26001
- **Manufacturer**: Ken-A-Vision
- **Website:** www.ken-a-vision.com

Product Usage Instructions

Storage and Handling

1. Store the microscope in a dry and clean environment, away from direct sunlight, high temperatures, and violent vibration.
2. Handle the microscope with care to avoid impact and abrupt movement during transportation.

Cleaning and Maintenance

1. Keep all lenses clean by blowing off fine dust with a hand blower or wiping gently with a soft lens tissue.
2. Clean fingerprints and oil marks on the lens surfaces with a tissue moistened with a 3:7 mixture of alcohol and ether.
3. Avoid using organic solutions to clean other surfaces, especially plastic surfaces. If necessary, use a neutral detergent.
4. Do not disassemble the microscope after assembly to prevent damage.
5. After use, cover the microscope with the provided dust-cover and store it in a dry, clean environment to prevent rust.
6. Periodically check and clean the microscope to ensure proper performance.

Setting up the Microscope

1. Place the microscope base on a flat, firm surface and position the frosted stage plate on the base.

Focusing and Observation

1. Check the coarse focus knob on either side of the main support to ensure it turns easily.
2. To adjust the degree of tightness of the focusing arm, hold one focusing knob and turn the other to attain a suitable position. Clockwise direction is tight, counterclockwise is loose.
3. Set the specimen in the center of the stage plate and clamp it if necessary.
4. Plug the small round plug into the back of the microscope base and connect the opposite end to a power outlet.
5. Turn the focusing knob and observe the specimen through the right eyepiece until the image is clear.
6. Observe the specimen through the left eyepiece and adjust the diopter ring until the image is clear.

Adjusting Eyepieces and Light Intensity

1. Adjust the two eyepieces along the direction indicated until they feel comfortable and a single image is seen.
2. Use the left rheostat (dimmer knob) to adjust the light intensity of the bottom (transmitted) light.
3. Use the right rheostat (dimmer knob) to adjust the light intensity of the upper (incidental) light.

Before use

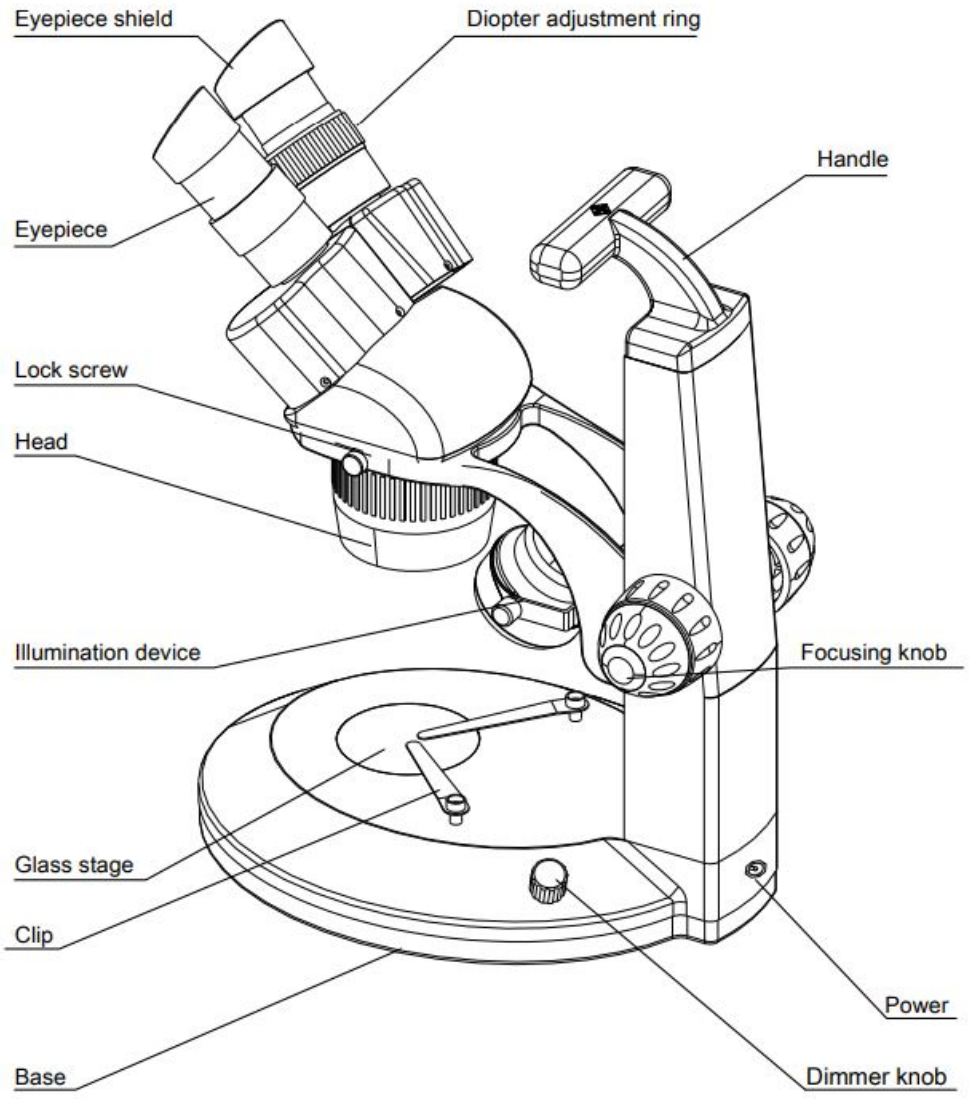
Notice

1. The microscope should be stored in a dry and clean environment. Do not expose the microscope to the direct sunlight. Avoid high temperatures and violent vibrations.
2. This microscope is a precision instrument. Handle with care. Avoid impact and abrupt movement during transportation.
3. To keep the image clear, clean any fingerprints or stains on the surfaces of the lens.
4. Never turn the left and right focusing knob in the opposite direction at the same time. Microscope damage will occur.

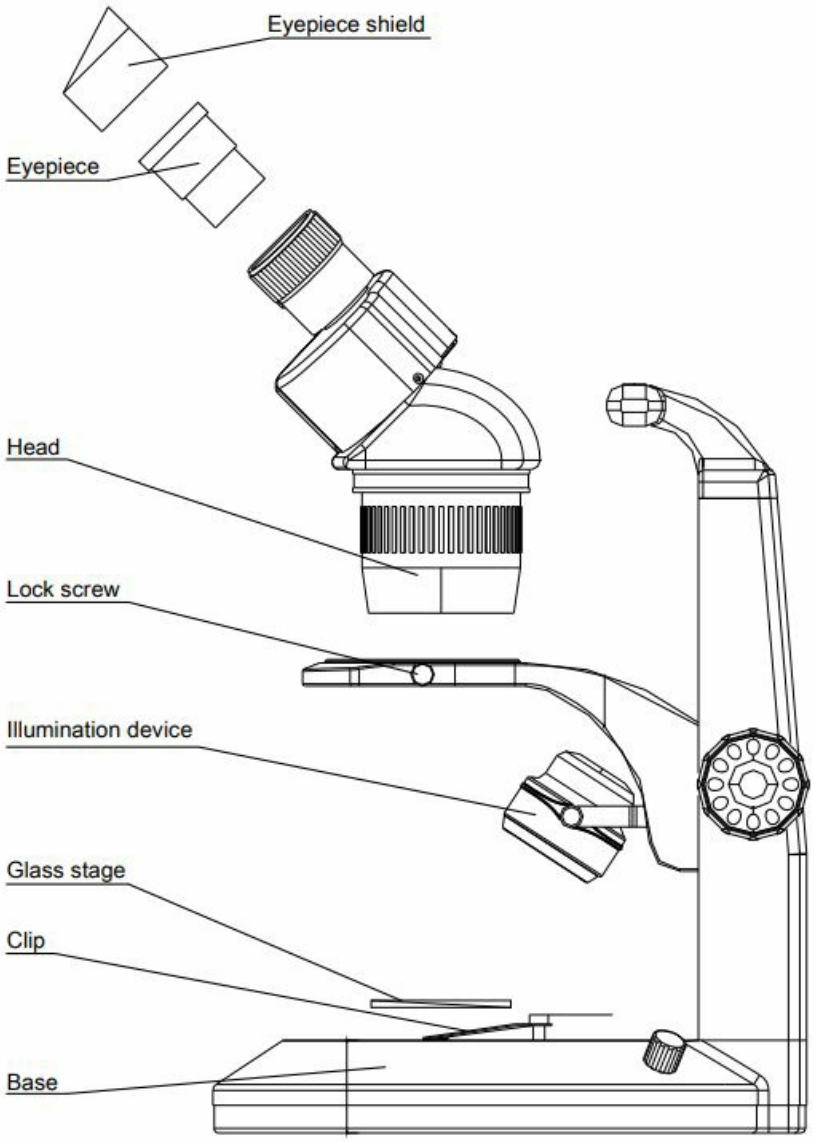
Maintenance

1. All lenses must be kept clean. Fine dust on the surface of the lens should be blown off with a hand blower or wiped off gently with soft lens tissue. Fingerprints and oil marks should be cleaned with a tissue moistened with a small amount of a 3:7 mixture of alcohol and ether.
2. Never use organic solutions to clean the other surfaces (especially the plastic surfaces). If necessary, please use a neutral detergent.
3. Once assembled, do not take the microscope apart as this may cause damage to the microscope.
4. After use, cover the microscope with the provided dust cover and store it in a dry, clean environment to prevent rust.
5. To ensure proper performance, please check and clean the microscope periodically.

Nomenclature



Assembly



Operation

1. **Position the glass stage**
    1. Place the microscope base on a flat, firm surface and position the frosted stage plate on the base. (Figure 1)

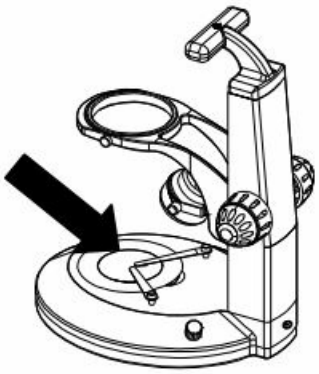


Figure 1

2. **Adjust the degree of tightness of the focusing arm**
    1. Check the coarse focus knob on either side of the main support. The coarse focus knob should turn easily.

2. If you want to adjust the degree of tightness of the focusing arm, you can hold one of the focusing knobs and turn another one to attain a suitable position. The degree of tightness relies on the direction to be turned. The clockwise direction is tight; counterclockwise is loose. (Figure 2)

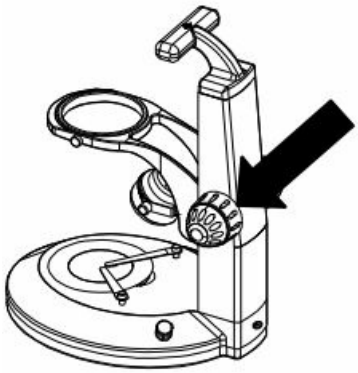


Figure 2

3. **Set the specimen slide**
    1. Set the specimen in the center of the stage plate. If necessary, clamp the slide with the clips.
    2. To operate, plug the small round plug into the back of the base of the microscope and then plug the opposite end into the power outlet.
4. **Adjust focusing knobs and diopter**
    1. Turn the focusing knob and observe the specimen through the right eyepiece until the image of the specimen is clear.
    2. Observe the specimen through the left eyepiece and adjust the diopter ring 1 until the image is clear. (Figure 3)

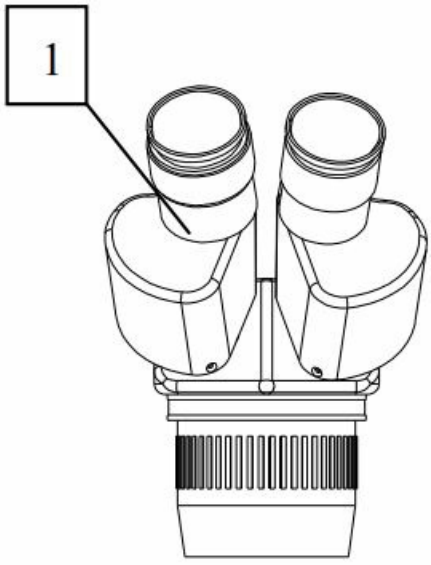


Figure 3

5. **Adjust the interpupillary distance**
    1. Adjust the two eyepieces along the direction of the arrow shown in Figure 4 until the eyepiece feels comfortable and a single image is seen.
    2. Use the left rheostat (dimmer knob) to adjust the light intensity of the bottom (transmitted) light.
    3. Use the right rheostat (dimmer knob) to adjust the light intensity of upper (incidental) light.

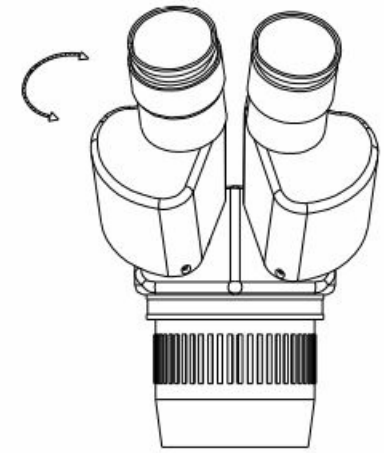


Figure 4

Configuration chart

T-22XXX Series Configuration

Product Number		T-22001	T-22011	T-22021	T-22041	T-22051	T-22061
Magnifications		10x & 30x	15x & 45x	20x & 60x	20x & 40x	30x & 60x	40x & 80x
Eyepieces	2 – 10x	O			O		
	2 – 15x		O			O	
	2 – 20x			O			O
Heads / Objectives	1x & 3x	O	O	O			
	2x & 4x				O	O	O

Note: The items marked “O” are included; others are optional.

T-26001 Series Configuration

Zoom Magnifications		7x – 45x	10.5x – 67.5x	14x – 90x
Eyepieces	2 – 10x	O		
	2 – 15x		O	
	2 – 20x			O
Objective Zoom Range	0.7x – 4.5x	O	O	O

Note: The items marked “O” are included; others are optional.

Technical specifications

Note: The items marked “O” are included; others are optional.

T-22XXX Series optical specifications

Objective Mag.	Working Distance (mm)	Eyepiece		Eyepieces (optional)			
		SC6EP10		SC6EP15		SC6EP20	
		Mag.	Objective field	Mag.	Objective field	Mag.	Objective field
1X	100	10X	20	15X	15	20X	11
2X		20X	10	30X	7.5	40X	5
3X		30X	6.7	45X	5	T-22XXX SERIESX	3.3
4X		40X	5	T-22XXX SERIESX	3.75	80X	2.5

Auxiliary objectives for T-22XXX Series

Auxiliary objectives	Magnification	Working distance mm
SC6OB5	0.5X	165
SC6OB15	1.5X	45
SC6OB20	2X	30

1. Working distance is fixed regardless of the magnification factor.
2. Total magnification = Objective mag. X Auxiliary mag. X Auxiliary mag.
3. Diameter of field of view (mm) = Eyepiece field
    - Objective magnification X Auxiliary objective magnification
4. Photo adaptor mag. = Objective mag. X Auxiliary objective mag. X Photo eyepiece mag.

Configuration specifications of T-22XXX Series

Model		T-22001	T-22041
Head	Objective magnification	1X 3X	2X 4X
	Working distance	100mm	
	Observation angle	45°	
	Interpupillary distance adjustment	Linkage between left and right eyepiece tube range of single adjustment: 54-75mm	
	Diopter adjustment	Range of single adjustment ±5D	
	Mount with auxiliary objectives	Screw hole M48*0.75	
Objective	Field of view	φ20mm	
Main body	Mount the head	Mount the head in the bracket hole (diameter: φ76mm)	
	Focusing device	Focus adjustment by turning the focusing knobs. Range of single adjustment: 10 mm	
	Glass stage	Diameter φ60mm	
	Clips	Put it on the base from top	

Troubleshooting

Trouble	Cause			Remedy
1.Double images	Interpupillary distance correct	is	not	Adjust the interpupillary distance
	Diopter adjustment correct	is	not	Adjust the diopter
	Left and right eyepieces are different magnifications.			Mount eyepieces of the same magnification
2.Dirt appears in the field of view	Dirt on the specimen			Clean the specimen
	Dirt on the surface of eyepiece			Clean the surface
3.Image is not clear	Dirt on the surface objective	of	the	Clean the objective
4.Image is not clear while adjusting the focus	Diopter adjustment correct	is	not	Adjust the diopter
	Focus is not correct			Adjust the focus
5.The focusing knob does not turn smoothly	The focusing knob is too tight			Loosen it to a suitable position
6.The image is obscure because of the head is slipping down by during observation	The focusing knob is too loose			Tighten it to a suitable position
8.Eyes feel tired easily	Diopter adjustment correct	is	not	Adjust the diopter
	Brightness of light is not correct			Adjust the brightness
	The bulb correctly	was not	inserted	Insert it correctly

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FAQ'S

What are the available product numbers for Vision Scope 2 Stereo Microscope?

The available product numbers are T-22001, T-22011, T-22021, T-22041, and T-22051.

Documents / Resources

	KEN-A-VISION T-22041 Vision Scope 2 Stereo Microscope [pdf] Instruction Manual T-22041 Vision Scope 2 Stereo Microscope, T-22041, Vision Scope 2 Stereo Microscope, Scope 2 Stereo Microscope, Stereo Microscope, Microscope

References

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