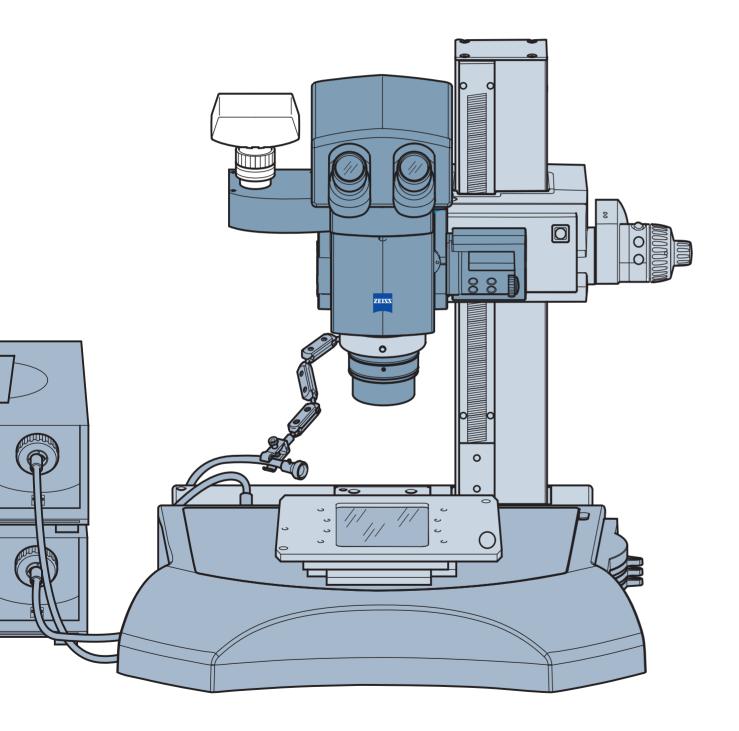


## System Overview: Modular System of Stereo and Zoom Microscopes

SteREO Discovery.V8 | SteREO Discovery.V12 | SteREO Discovery.V20 Axio Zoom.V16



# **Modular System of Stereo and Zoom Microscopes**



Our stereo and zoom microscopes feature a modular design, enabling you to individually configure your microscope according to your applications.

In general terms, these microscopes are made up of three main assemblies:

#### Microscope

Refers to all the optically relevant components in a microscope that are required in order to produce an image for viewing directly or on a monitor.

#### **Stand**

A stand that has the following functions: supporting the microscope, making it possible to focus on the specimen, and holding the specimen and guiding it if necessary.

#### Illumination

Refers to all the components required for illumination and contrasting under reflected light, transmitted light, and mixed light.

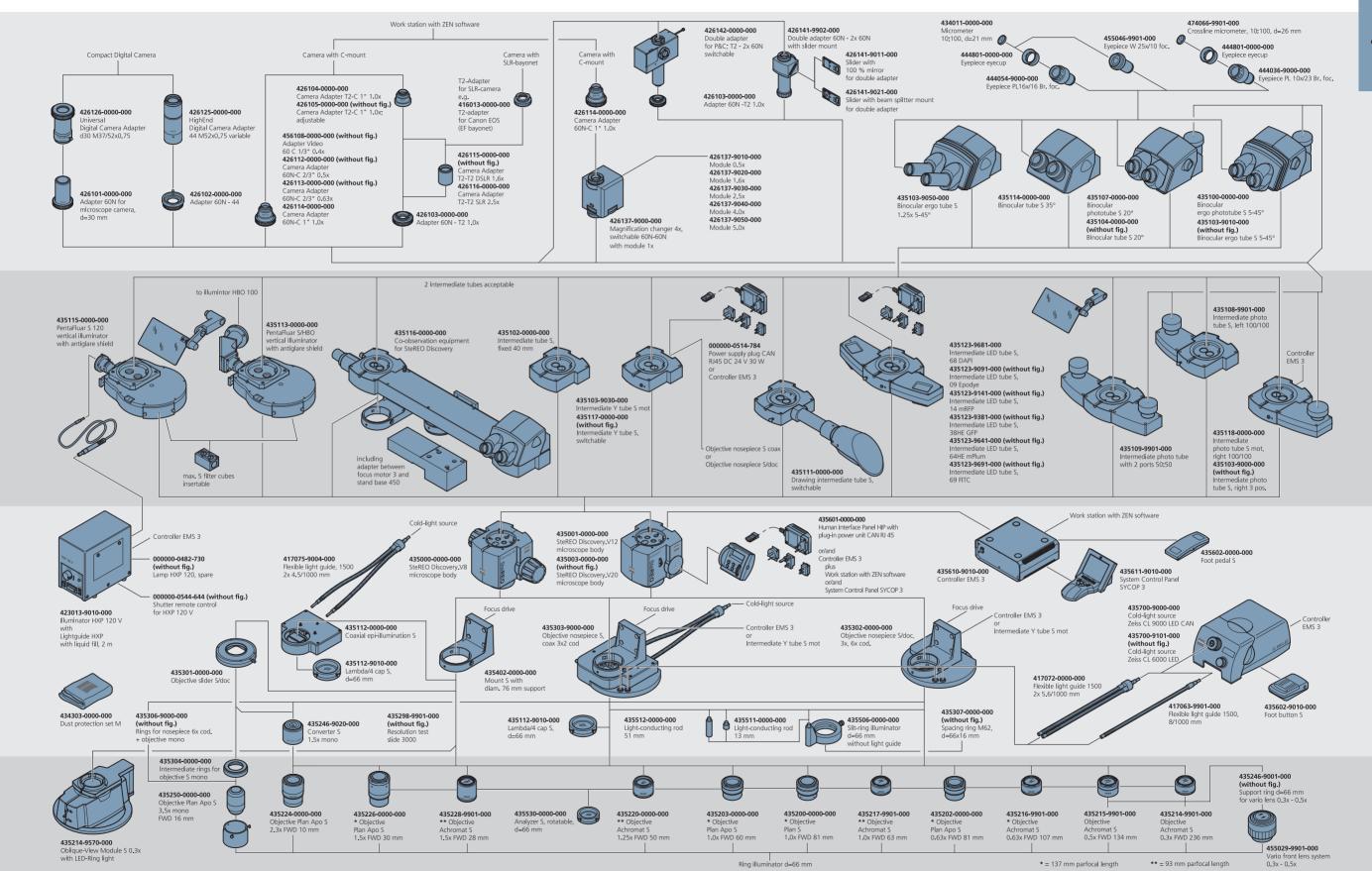
Microscope bodies Observation tubes Intermediate tubes Objectives Eyepieces Camera adapter

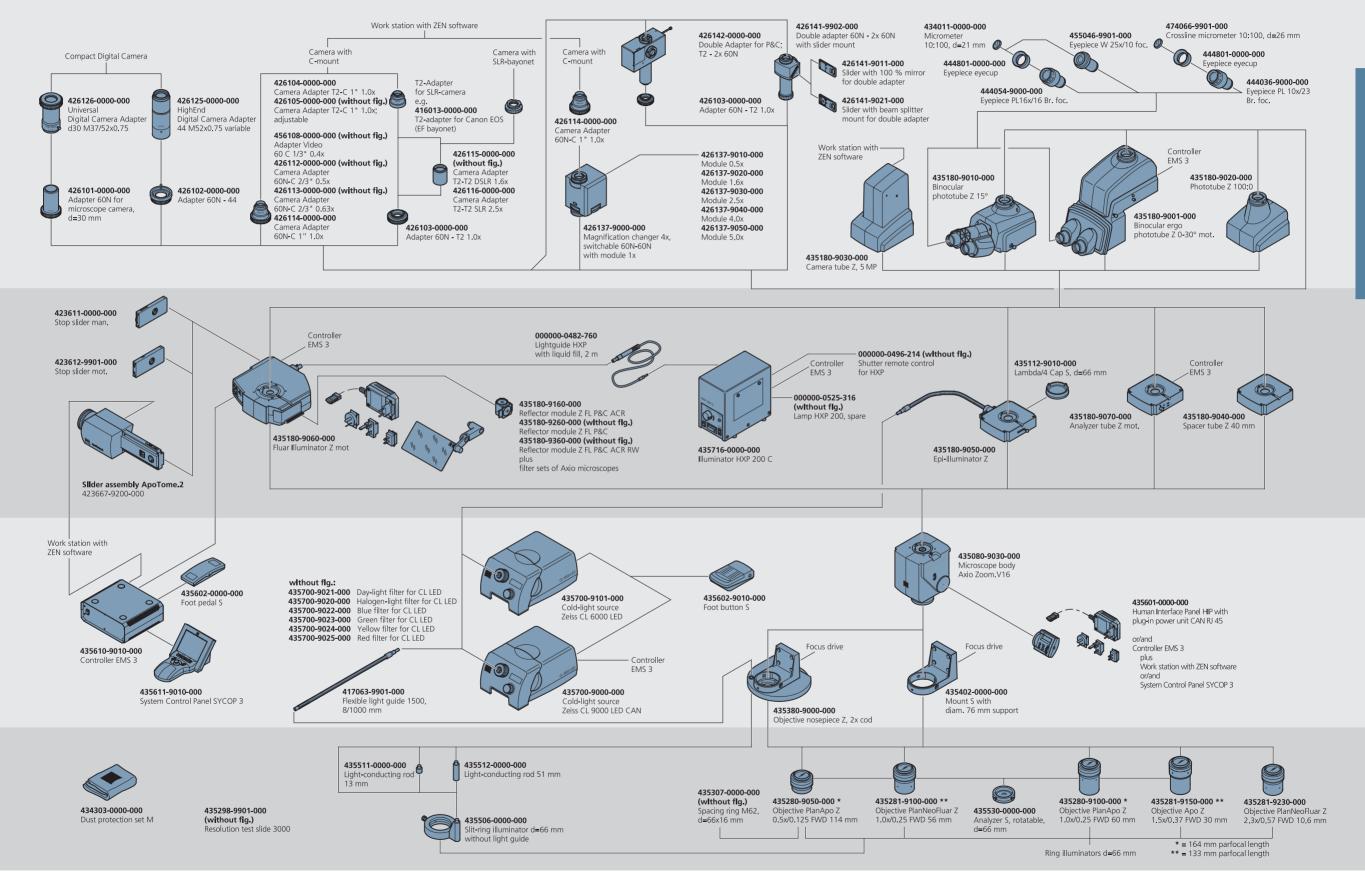
Stand bases
Focusing devices
Mounts
Stages

Reflected light illuminations Transmitted light illuminations Light sources

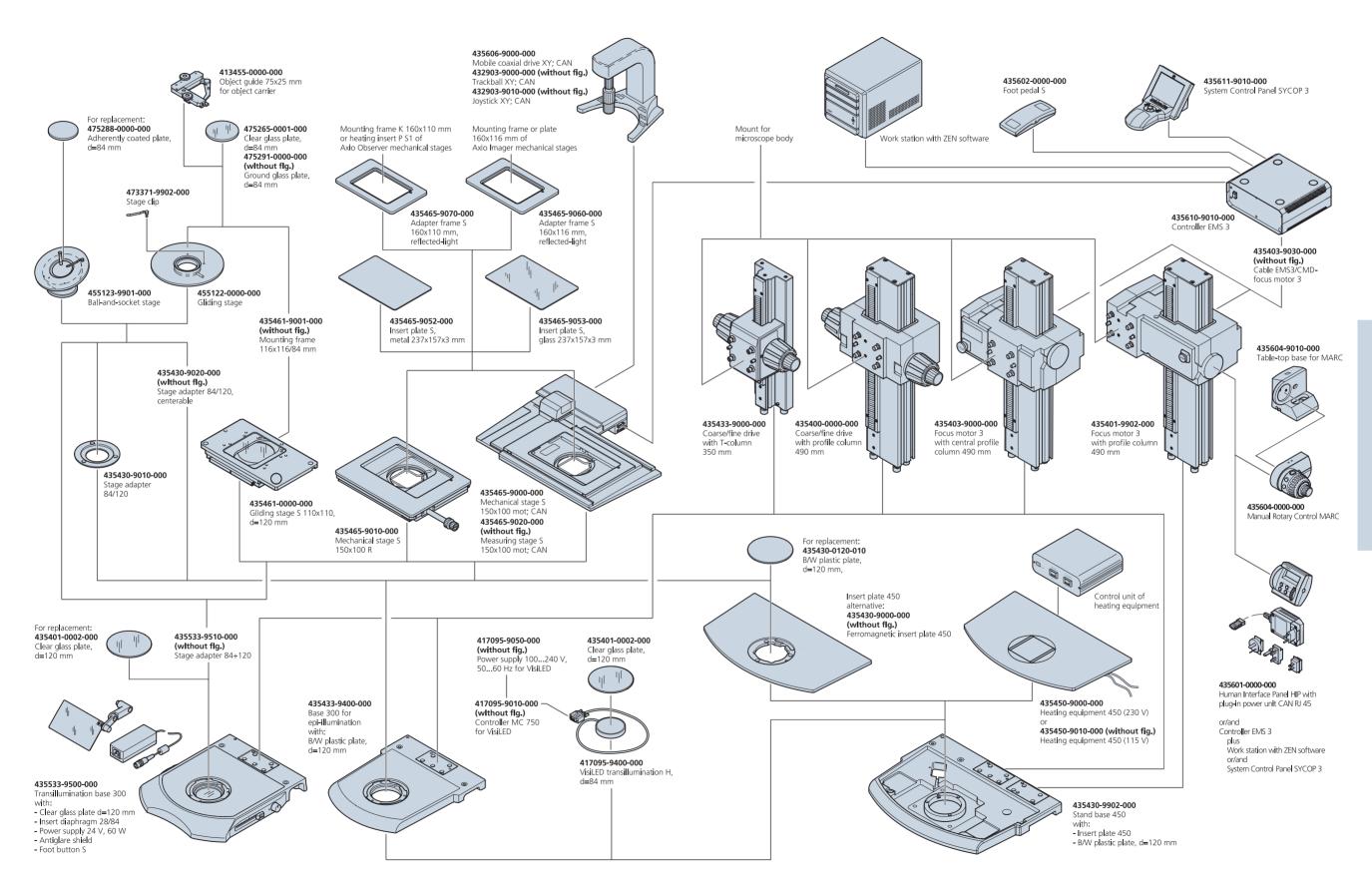
Detailed specifications and dimensions for the interfaces in the modular system components

## **SteREO Discovery**

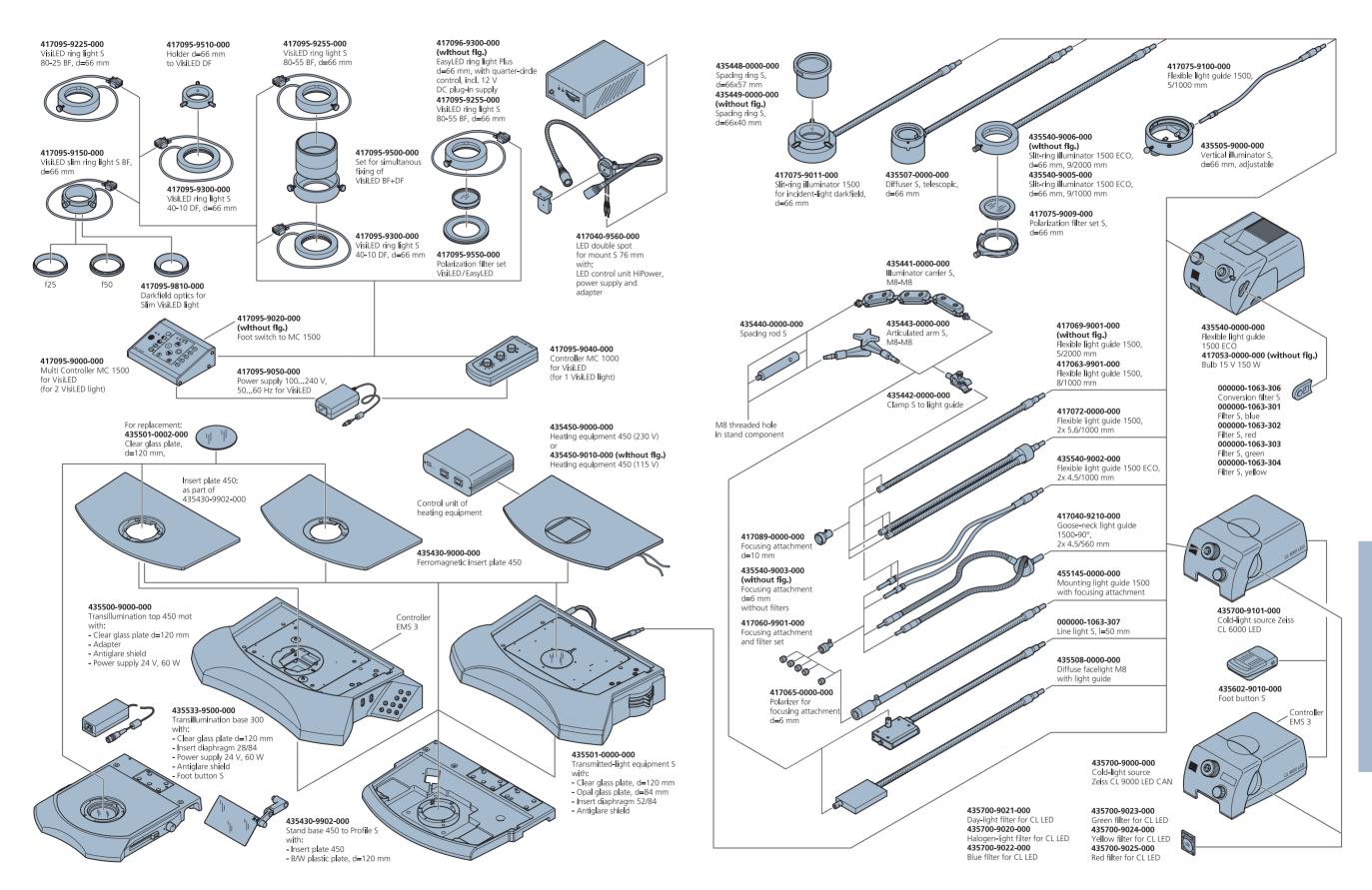




### **Stands**

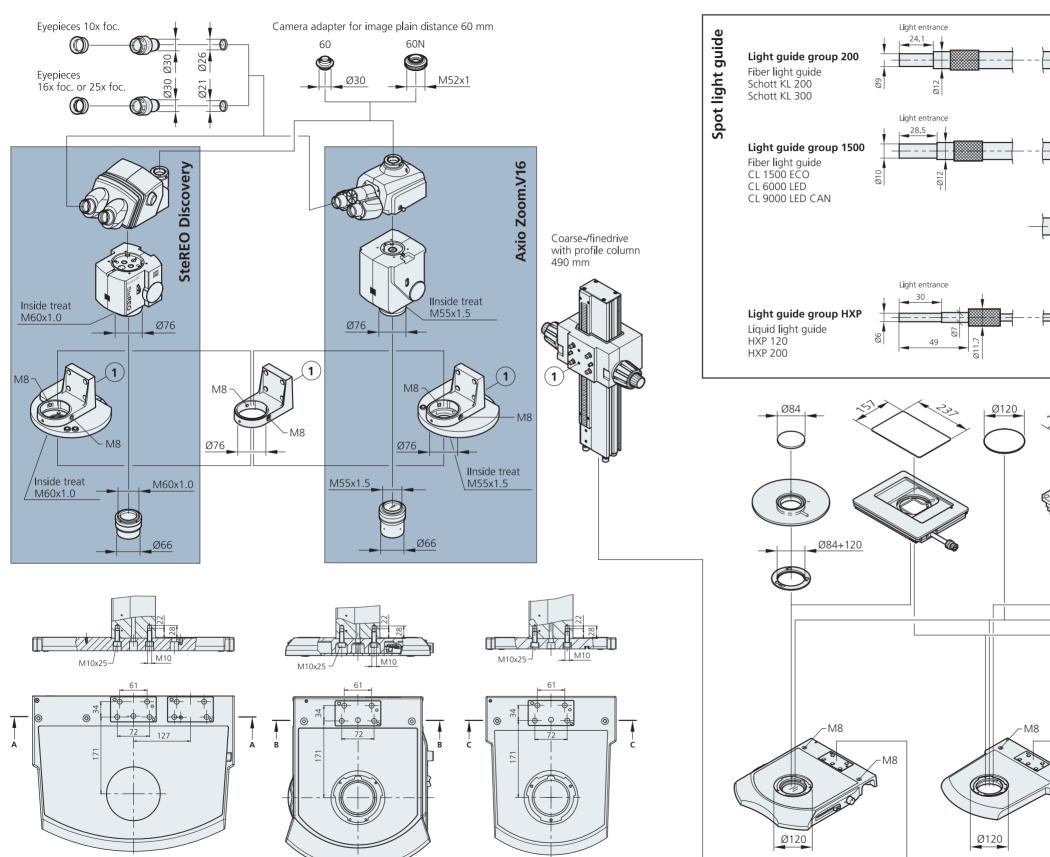


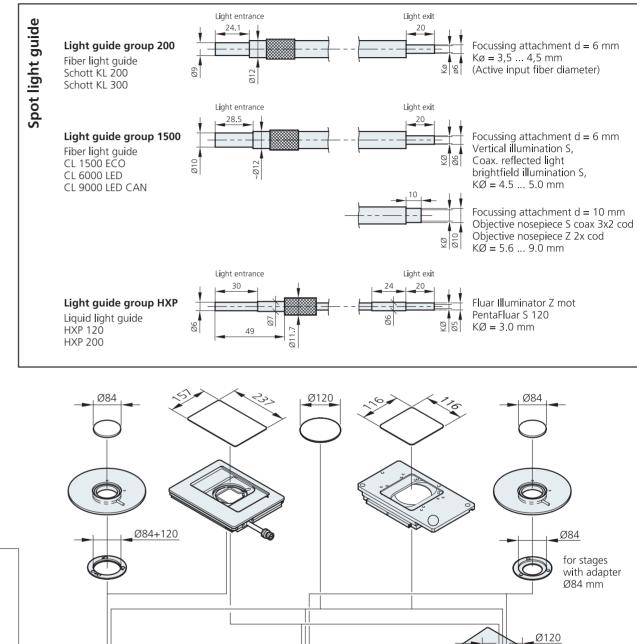
## Illumination



Ø84

## **Interfaces**



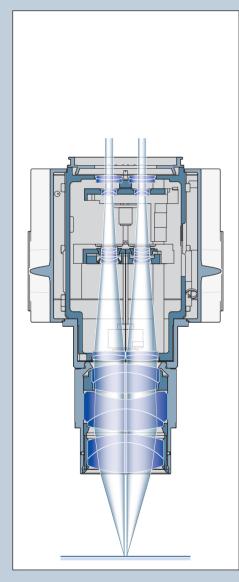


## **A Comparison of Zoom Systems**

## Stereomicroscopes

<u>Two-</u>channel optical system

#### SteREO Discovery.V12 SteREO Discovery.V20

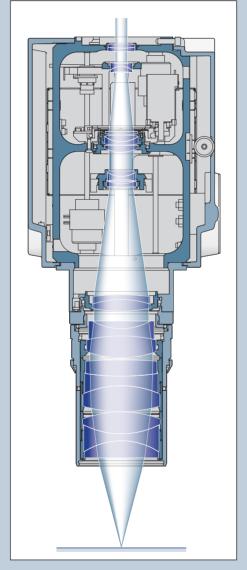


Two systems that move parallel to each other feature a common main objective. The circumferential pairs of light rays produce a convergence, or stereo, angle that creates the impression of a 3D image.

#### **Zoom microscopes**

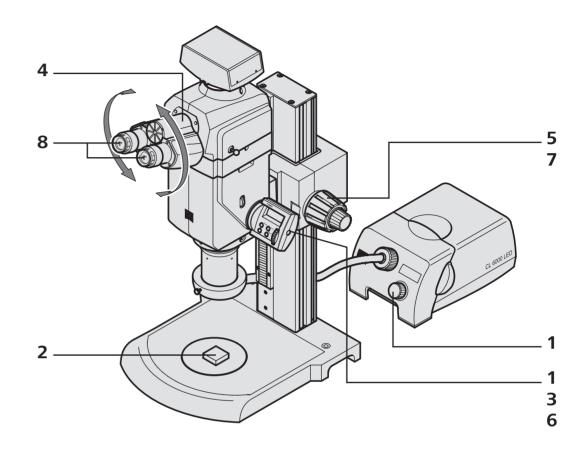
Single-channel optical system

#### Axio Zoom.V16



The significantly larger numerical aperture of the widened optical channel results in a higher level of resolution and brighter fluorescence in equivalent fields of view.

## **Basic Settings for Stereo and Zoom Microscopes**



- **1** Turn on the microscope and illumination
- **2** Position the specimen and realign the illumination if necessary
- **3** Set the smallest zoom setting / magnification level
- **4** Adjust the interpupillary distance as necessary
- **5** Focus on a detail of the specimen (bring it into sharp focus)
- **6** Set the maximum zoom setting / magnification level
- **7** Focus on a detail of the specimen (bring it into sharp focus)
- **8** Use the adjustable eyepieces to compensate for any lack of definition for each eye separately

If you set up your microscope this way, you will be able to obtain consistently sharp images across its entire zoom range.





