

V9000 LABORATORY MICROSCOPE

V9000T -- LABORATORY PHOTO MICROSCOPE



The V9000 microscope series delivers outstanding optical performance and price point to meet the demanding needs of any clinical, teaching or educational lab. Plan Achromat Infinity optics, LED illumination, and 20mm field of view couple with ergonomics and safety features like a travel limit safety stop, making the V9000 an excellent choice for users with high resolution requirements with limited budget.

PLAN ACHROMAT-INFINITY OPTICS

The v9000 optical system is built on an Infinity optical design. This optical design produces images high in resolution and contrast. In addition, the optics provides superb color correction so the user visualizes the most accurate and brilliant color reproduction.

All the objectives are PLAN Achromat so they provide full correction and provide an in focus image from across the entire 20mm eyepiece. This eliminates eye strain and headaches caused by standard laboratory optics.



The ball bearing nosepiece provides for a smooth transition between objective magnifications. In addition, all the lenses are parfocal so focus is maintained between objectives, eliminating the need for constant focusing.

The V9000 series scopes have a reverse facing nosepiece so all the objectives are mounted facing the rear of the scope. This protects the front glass elements of each lens and eliminates damage. The nosepiece has smooth ball bearing movements and positive click stops so the user is assured their lens is in correct position without removing their eyes from the scope.

An ABBE condenser is provided with the V9000 scope. The condenser produces a crisp illumination path to work with the Infinity Optical system. The condenser has an iris diaphragm to enable contrast adjustments. In addition, the condenser is labeled so users can easily set the correct aperture setting for each objective if desired. Built in slot for phase sliders allows for easy upgrading.

LED ILLUMINATION

With a 25,000 hour LED array the V9000 produces images with constant intensity from edge to edge-regardless of the magnification. The LED is tuned to Daylight White temperature, providing a precise white background and enhancing the contrast in the samples. By having this advanced illumination system, you eliminate the constant intensity adjustment normally required when changing objective magnifications.

There is a front mounted variable intensity control to allow the fine tuning of the desired intensity for each user.



FOCUS--ACCURATE AND SAFETY IN DESIGN

The V9000 microscope offers co-axial coarse and fine controls. There is an adjustable tension for the coarse focus to allow users to select the required pressure during operation.

The fine focus is graduated at a 2um movement to allow accurate control in achieving the best focus. The coarse focus is graduated to 5mm per rotation to allow for quick focusing to the proper focal plane.

A focus travel limit stop is incorporated into the V9000. Unlike other scopes where this needs to be set and can be disengaged, each V9000 is set at the factory so that the travel limits match the objective lenses on the scope. This feature provides a safe operating environment by limiting the vertical travel of the stage to keep both the sample and lens element from crashing... and cannot be disengaged by users.

Brass fine focus gears ensure a smooth, constant focus and provide superior stability and longevity of your microscope.



EYETUBES

Ergonomics was the focus when the eyetubes were designed for the V9000 series microscopes. The eyetubes provide a low profile, 20 degree viewing angle, allowing the user to look forward into the scope as opposed to down in to the scope. This direct upright view reduces both eye and neck strain. The eye tubes can be rotated 180 degrees to allow different postures when using the scope and offer a large interpupillary adjustment of 48mm - 75mm

The V9000 scope has a binocular eyetube



Binocular Eyetube

The V9000t has an integrated photo port with high transmission dichroic prism to direct the light to both the camera and the eye pieces simultaneously. There is NO slider required for the light selection. This technology eliminates the need of redirecting the light for visual or photo use and eliminates the need for contact intensity adjustment when performing digital imaging.



Trinocular Photo Eyetube With VDHD6m camera

EYEPieces

An industry best 20mm Field of View eye piece is standard with the V9000. A high eye-point design reduces the strain that users experience with long hours at the scope. The eyepiece has increased glass surface to eliminate inclusions from head movement.

Each eyepiece has a focusable diopter adjustment to allow a perfect focus, regardless of any stigmatisms or if the user wears eyeglasses.

Eyepiece magnifications are selectable at 10x, 12.5x, 15x and 30x.



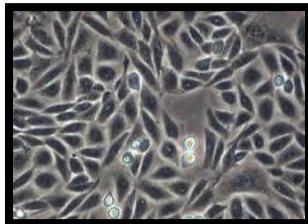
There is a pointer in one eyepiece and a removable reticule shelf to add a measuring micrometer.

Eyepieces can be locked into position to prevent classroom tampering. This also allows for the user to adjust the focus with one hand.

OPTIONAL ILLUMINATION TECHNIQUES

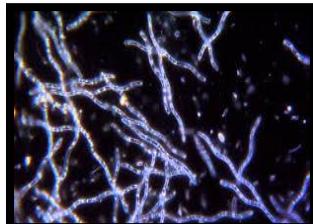
The V9000 is a modular design that allows easy upgrading as your requirements change. By incorporating the high intensity LED, sufficient illumination is available to accommodate various techniques.

Phase Contrast



High Contrast with neutral background colorization can be viewed. This technique is suitable for observation of unstained samples or cells.

Darkfield



This technique enables the detailed viewing of minute structures in transparent and\or unstained samples. Both a dry and oil condenser are available.

Simple Polarization



A combination of a Polarizer and Analyzer provide crystal identification in birefringent samples.

DIGITAL IMAGING MADE EASY

The V9000t supports direct mounting of all manufacturer cameras to support all facets of digital imaging. Visual Dynamix is a universal distributor of all major camera manufactures so integrating the best camera for the application is possible.

An exclusive feature of the V9000t is the Ergonomic eye-tube with built in camera port. This viewing eye-tube incorporates a mirror with coatings that direct the light to both the eyepieces and the camera port simultaneously. The design allows the user to capture images, consult, and teach while they are looking into and controlling the microscope. This also eliminates the need for constant light intensity adjustment when digital images as the light is at a constant comfortable balance.



V9000t with VDHD6m HD Camera