



## Compact Digital Microscope System

Nike microscopes with restrictive eyepieces, the O.C. White **Super-Scope**<sup>®</sup> features 'heads up' viewing. Instead of squinting through lenses, the **Super-Scope**<sup>®</sup> has a 12" monitor mounted directly at eye-level. This configuration greatly reduces eye and neck strain and allows several people to view the magnified object at once. Standard magnification is 1-40x (up to 80x with options).

The large working distance of our precision glass optics (from 6" to infinity) greatly expands the possibilities over a traditional microscope for what can be magnified and how the specimen can be handled. No longer limited to razor-thin samples meticulously prepared on glass slides for viewing, **Super-Scope**<sup>®</sup> can handle clunky, layered objects held and rotated by the operator in real time.

The heart of the **Super-Scope**<sup>®</sup> is our 6MP Ultra-Cam<sup>™</sup> Hybrid HDMI/USB Camera. Able to capture high-resolution images (3264 x 1836) and video (30 frames per second), the camera comes with pre-installed Advanced Imaging &

#### Super-Scope® features include:

- 6MP Ultra-Cam II<sup>™</sup> Hybrid HDMI/USB Camera
- 12" integrated LCD Monitor
- Standard magnification range of 40x (up to 80x with options)
- Variable focal design allows unlimited working distance
- Built-in imaging software that can be run without a PC (wireless mouse included)
- Advanced measurement software that can be run from a Windows PC
- Multiple base and lighting options are available
- ESD Safe
- 5 Year Mechanical Warranty

Measurement Software suite (AIMS). Controlled by an included wireless mouse, the software offers calibrated measurement, labeling, an image gallery, and the ability to export data to Excel or a TXT file—all independently, without the need for a PC. A 16GB SD card slot allows users to save image files.

layer controls, HDR image creation, fluorescent color controls, the ability to save presets, and more. This software requires a Windows PC to operate in tandem with the **Super-Scope**<sup>®</sup>. For a complete set of software features, please see the final page of this document.

More advanced software is also included with the **Su-per-Scope**<sup>®</sup>, which provides image stitching, field stacking,

# Super-Scope® with Integrated 12" LCD Screen



# 6MP Ultra-Cam II™ Hybrid HDMI/USB Camera features include:

- Image Capture (6MP 3264 x 1836)
- Video Capture (30fps)
- SD card slot with 16GB SD card
- On-screen controls via a wireless mouse (included)
- Pre-installed Advanced Imaging & Measurement Software Suite (AIMS)
- Additional, more robust software is available that requires a Windows PC

#### AIMS features include:

- Image gallery
- Live vs. frozen image comparison
- Calibrated measurement
- Labeling
- Export to Excel or TXT file
- And more!

#### Windows PC software features include:

- Image stitching
- Field stacking
- Layer control
- Fluorescent color controls
- HDR images
- Class counting
- Extended depth of focus
- Flat fielding
- Save custom presets
- And much, much more!

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# 6MP Ultra-Cam<sup>™</sup> II Digital Camera

White's 6MP Ultra-Cam<sup>™</sup> II Digital Camera captures high-resolution images and video of magnified objects. Along with our MacroZoom line of video inspection systems, it works with O.C. White's trinocular microscopes (such as the ProZoom 6.5).

The camera automatically analyzes images. It optimizes white balance, exposure time, and saturation, presenting the best possible image without the need for manual adjustments beyond focusing. The 3D noise reduction function keeps images crisp and noise-free—even for long exposures in low light situations. Exposure times can be controlled from 2 ms to 10 seconds, with 20 levels of gain adjustment. Images are previewed at 2MP (1920 x 1080) resolution, and final images can be saved up to 6MP (3264 x 1836) resolution. Video is captured at 30 fps. Both images and video are saved to an included 16GB SD card.

The **6MP Ultra-Cam<sup>™</sup> II Digital Camera** can be operated independently without a PC. Basic imaging and measurement software comes installed, which can be controlled with a mouse. Images and video can be saved to a gallery for future comparisons, or exported to the card.

Advanced software with a suite of more dynamic measurement tools is also provided, requiring a Windows PC to operate. These tools allow you to calibrate your cameras and draw directly on the magnified images with measurements that are accurate to within 1/100 microns. This data can be exported as TXT or Excel files. Additional features include image stitching, improved fluorescence setting, and adding notes and annotations to videos and images. A complete list of features is included at the end of this document.

#### The 6MP Ultra-Cam<sup>™</sup> II Digital Camera features include:

- Preview images: 2MP (1920x1080)
- Capture images: 6MP (3264x1836)
- Video frame rate: 30fps
- Automatically optimizes white balance, exposure time, and saturation
- HDMI and USB compatible for maximum connectivity
- SD card slot (includes 16GB card)



Built-in imaging software suite features include:

- On-screen controls via wireless mouse
- Image/Video Capture
- Exposure and gain controls
- Gamma, contrast, and saturation settings
- Red, blue, and color temperature settings
- Brightness, sharpness, and de-noise settings
- Flip horizontal and vertical
- Zoom in/out

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- Set grid overlay
- Live vs. frozen image comparison
- Review image gallery

An overview of the advanced imaging and measurement software features is available on the reverse side of this page.

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# 6MP Ultra-Cam<sup>™</sup> II Digital Camera Advanced Software Features

n addition to built-in software, **6MP Ultra-Cam™ II Digital Camera** comes with advanced imaging and measurement software. Windows PC required.

Features include:

### **Basic camera controls:**

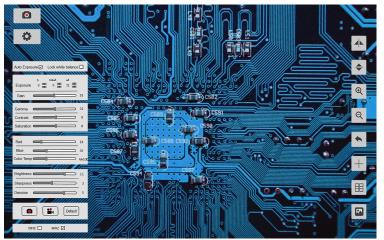
- Automatic exposure and white balance
- Choice of **image formats** (JPEG, BMP, TIFF, and RAW)
- Choice of video formats (depending on which are available on your computer)

### **Image Acquisition:**

- **Continuous shooting**—For still photography, save a designated number of sequential images
- **Auto-stop video**—Video capture can be configured to stop after a set number of frames or seconds
- Set **Frame Speed** (normal/high) and **Data Width** (8Bit/16Bit)

### **Color control:**

- Flat fielding—Correct uneven brightness
- **Monochrome**—Create a gray-scale image
- Color enhancement—Make colors more vivid
- **Parameter settings**—Save up to twenty settings for repeat use
- **Measurement tools**—More than a dozen tools for measuring, labeling, documenting your magnified images. Draw lines, parallel lines, rectangles, 2-point circles, concentric circles, polygons, arcs, and more directly on the images and save the precise, calibrated measurements for later review.



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- Edit measurement appearance—Control the appearance of your annotations; edit color, size, and scale
- **Calibration table**—Records frequently used measurement scales for repeated use
- Layer control—Allows measurements to be saved and viewed per layer to keep complex objects clear
- Generate measurement list—Collects measurement information in one place; can be exported as TXT file or to Excel

### Advanced imaging features

- **Fluorescence settings**—Variety of controls to improve capture of fluorescent-lit images, including channel-specific levels settings, black balance, and capture mode options (manual, fine, and excellent)
- Fluorescence color control—Colors can be designated for different dye types used in fluorescence imaging. A final, composite image can then be assembled showing the different hues
- **HDR Image**—Multiple images taken of the same scene at different exposures can be combined to create a composite with greater detail and color fidelity.
- **Class counting**—This feature helps users manually count features in a photo by having the software keep track. Each item identified is indicated with a colored dot. Five different types of samples can be tracked independently.
- **Extend Depth of Focus**—Sometimes it's impossible to see all of an un-flat object in focus. This feature allows the user to photograph the same object multiple times with different areas in focus, and then combine them into one, clear image.
- Image Stitching—At high magnification, it's often impossible to see the entirety of an object, even on a large monitor. This feature enables users to combine multiple views of the same object into a single, large image.

