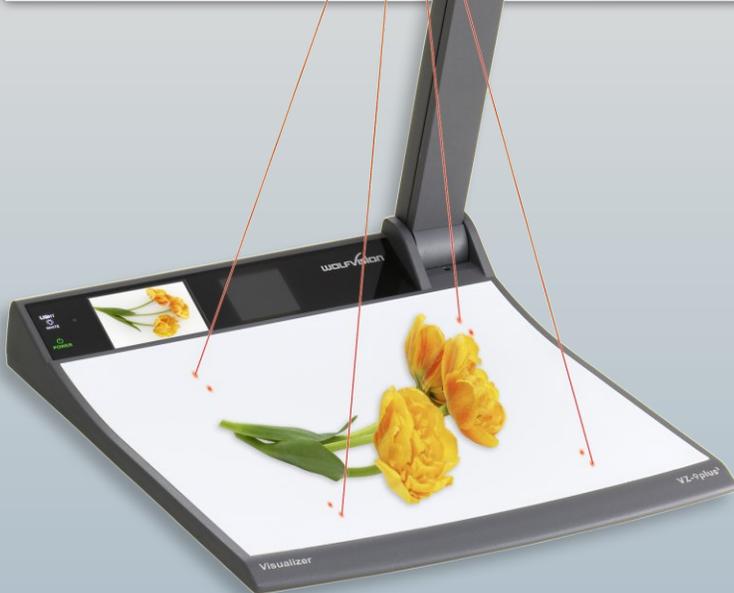


ENGLISH **WOLFVISION®**

Visualizer **VZ-9plus³**



**The Third
Edition**

Unique Design and Usability



The new Camera Head is a real "Eye Catcher"

The Visualizer VZ-9plus³ is the top of the line unit amongst WolfVision's portable Visualizers. It surpasses WolfVision's popular VZ-8 Visualizer series as well as any other Visualizer on the market in every way:

- even more useful and unique features
- even easier to operate (easier positioning of objects)
- even better picture quality

Now in its third generation the VZ-9plus³ comes with a completely redesigned housing - new, modern and elegant.

Large Zoom Range

A large optical zoom range is one of the most important features of a Visualizer, because only an optical zoom can pick up objects in full resolution.

WolfVision's optical 16 times zoom offers the possibility to pick up objects as large as an open book (400 x 300mm / 15.8" x 11.8") and as small as a honey bee (25 x 19mm / 1" x 0.75") in full size to fill the screen.

For enlarging even smaller objects down to 6 x 4.5 mm (0.23" x 0.16") the Visualizer also offers 4x digital zoom.



New Light System for 100% even illumination on the working surface without any reflections or blinding.



→ Use our 360° (3D) viewer to check out the elegant design of the VZ-9plus³ at: www.wolfvision.com/360 ←

Outstanding Mechanical Stability and Long Lifetime

Outstanding mechanical stability has always been a basic requirement for all WolfVision products. Our Visualizers are solid and built to last a very long lifetime.

Just "touch" the unit and "feel" the difference between a WolfVision Visualizer and any other unit on the market!

The most sophisticated mechanical part of the Visualizer VZ-9plus³ is the intelligent arm with its 1-step folding system.

With just one simple pull, the arm comes up, camera and light automatically move into the working position and the unit switches on.



1-Step Set-up

Easy Positioning of Objects with:

Synchronized Lasermarkers ...

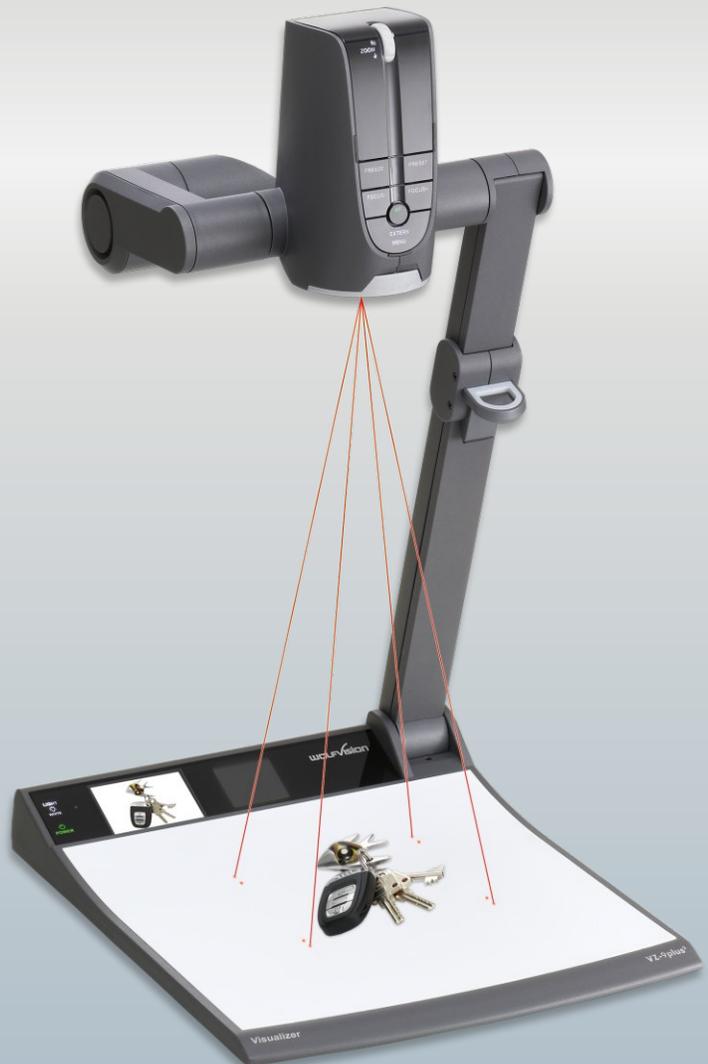
Small dots of laser light, projected from the camera head onto the working surface, mark the edges of the pickup area of the camera. This allows for easy positioning of objects on the working surface.

The "Lasermarkers" are synchronized with the camera and change accordingly when zooming in and out. While the "Synchronized Lasermarkers" can clearly be seen on the working surface, they remain invisible in the picture picked up by the camera.

The edges of images in 4:3 and 16:10 aspect ratios are marked on the working surface.

... and Built-in LCD Monitor

The unique combination of the "Synchronized Lasermarkers" and the built-in LCD monitor makes it easier than ever before to position an object on the working surface.





Easy to Use: Zoom Wheel / Continuous Autofocus

For a smooth presentation, it is very important that a Visualizer is extremely easy to use.

Less experienced users only need to use the zoom wheel on top of the camera head (or the zoom keys on the remote control). Everything else (focus, Iris etc.) is adjusted automatically by the VZ-9plus³. The zoom wheel offers the possibility to zoom with varying individual speeds.

The continuously working autofocus recognizes all objects very quickly and precisely. As a result, a presenter never needs to worry about focusing. For special objects a manual focus is also available.

Flexible Viewing Area / Turntable



Turntable

When objects are too big to be placed on the working surface or need to be shown from the side (like glasses of liquids etc.), just tilt the camera head and the light of the Visualizer to pick-up objects behind the unit.

The VZ-9plus³ makes recording outside of the working surface even more comfortable as it is mounted on a turntable. In this way a Visualizer can be used just like a camera on a tripod. Even horizontal pan shots are possible.

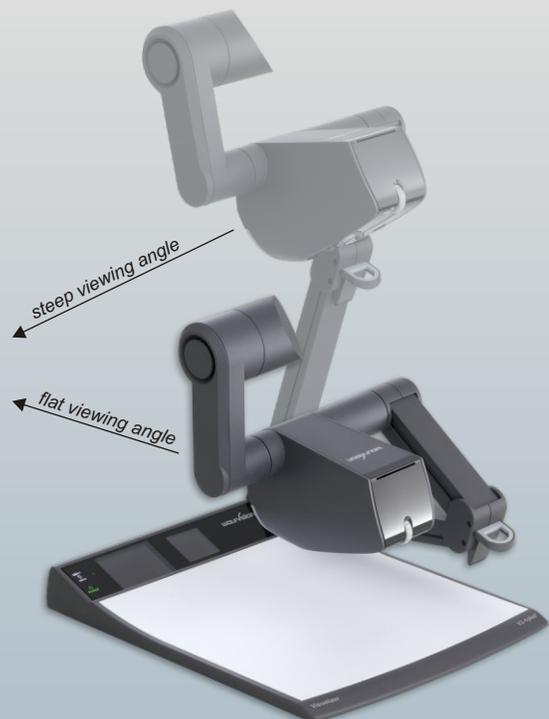
Sometimes a lower viewing angle than the one from the normal working position would be required. In such cases just fold the arm of the VZ-9plus³ down as much as required. The arm remains in this position to shoot objects from any angle.



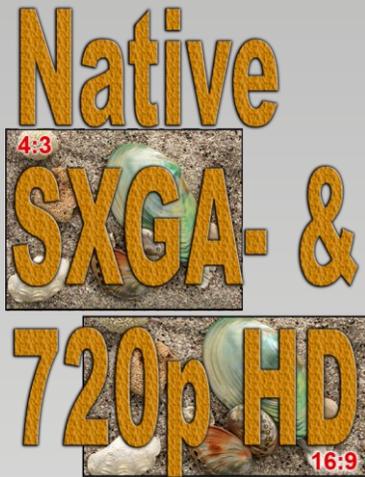
Recording from any Angle

The VZ-9plus³ can record objects behind and in front of the unit. This is perfect for showing a speaker or charts on a wall behind the speaker on a large screen during a presentation. When the camera of the Visualizer is turned to record in front of the unit, the image is automatically turned around 180 degrees ("image flip"), because otherwise such recordings would be upside down.

Recording is possible from almost any viewing angle as the camera can be tilted 290° and the light can be tilted 270°



State of the Art Picture Quality Extremely High Resolution



The VZ-9plus³ features a sensational high resolution 1-CCD camera with 30 frames per second and sRGB color precision. It can output native resolutions in all 3 popular aspect ratios:

- SXGA- 1280x960 pixel 4:3
- WXGA 1280x800 pixel 16:10
- 720p HD 1280x720 pixel 16:9



Using a display device with 1280 x 960 (or more) pixels, 820 lines of resolution are visible on your screen. But even when the image is downscaled by the Visualizer to XGA and output on an XGA display device the resolution is still around 740 lines. This is a much higher resolution than a native 1-CCD XGA camera can provide.

Even though the camera and lens are identical to the one used in WolfVision's VZ-8 Visualizers (third edition), the VZ-9plus³ outputs 70 lines more resolution, which proves just how much electronic hardware and software with even more computing power can do.

The high end scaler of the Visualizer can scale the picture at the image source into almost every popular image format (like XGA, 1080p, UXGA etc.) As a result the picture quality is not only perfect in native resolution, but also in all scaled signal formats.

Firmware Updates / New Mainboard



WolfVision's Visualizers are the only units on the market that offer upgradeable firmware. This allows new features and technical improvements to be added at no cost!

Downloading firmware updates from the internet and uploading them onto a Visualizer can be done in just 2-3 minutes. Serial (RS232), USB or LAN connections can be used for the update.

WolfVision's engineers are constantly working on new features and improvements to keep your units up to date with the technology of tomorrow!

The VZ-9plus³ comes with a new mainboard with even more computing power and additional resources (for more features and enhancements to be added later on via Firmware Updates).

LAN Port / Additional Network Features



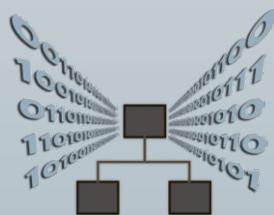
The LAN port is a key feature of all high-end Visualizers from WolfVision. It makes the Visualizer a part of the internal computer network and it can be used for communication over the Internet, if it is assigned an official (WAN) IP address.

Administrators of a larger number of Visualizers can use the LAN port to control, support and update all of their units from their local desktop PC.

The list of applications for the Visualizers LAN port is constantly increasing. It can be used for controlling, capturing still images, viewing live video streams, firmware updates, adjustments, menu settings and maintenance purposes.



Authentication for Built-in Webserver



Streaming in Multicast and Singlecast (Unicast)

New LAN features of the VZ-9plus³:

Authentication:

In order to prevent unauthorized users from logging into the Visualizer over the network, it is now possible to set administrator and user passwords. The transmission of the passwords over LAN is encrypted with MD5.

Multicast/Singlecast Streaming:

The VZ-9plus³ offers streaming of live images from a Visualizer in Singlecast (Unicast) and Multicast mode.

USB Device Port and USB Host Port



The **USB Device** port can be used for direct connections between the Visualizer and a computer. This way, a Visualizer can be used as a scanner for 3-dimensional objects. Images in JPG, TIF or BMP format can be taken in a fraction of a second - much faster than with a desktop scanner.

WolfVision's USB Software (Connectivity Software) works under Windows 2000, XP, Vista and 7 (32 and 64-bit) as well as Apple Macintosh. It is fully TWAIN/WIA compatible. This is important when using Visualizers in connection with graphic programs such as Photoshop, or for connecting them to Interactive Whiteboards (Smart Boards).

The fast USB 2.0 port can also output live motion. WolfVision's Connectivity Software can store AVI files and includes a video capture driver. You can view and save the live image from the Visualizer on your computer in almost every modern video editing software.



A new feature of the VZ-9plus³ is the **USB Host** port.

It can be used for connecting USB sticks and other "passive" USB devices. USB sticks can be used as an extension of the image memory and for uploading and downloading of images.

Upcoming Firmware Updates will increase the functionality of the USB Host port even more.

Internal and External Image Memory



Split image of memory

The user has the opportunity to store 9 images in the internal memory of the unit and recall them by just pressing one of the numerical keys on the infrared remote control. By pressing the "View All" key, a split image with all 9 pictures of the memory can be displayed, enabling easy selection.

When a USB stick is connected to the unit, the image memory can be extended to an almost unlimited number of images (upper limit is the size of the USB stick).

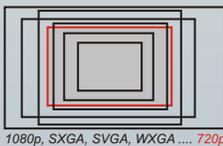
Computer Input



Instead of connecting a computer directly to a monitor or projector, the monitor output of the computer can be connected to the external input of the Visualizer. This has the advantage that a user can use the Ext/Int key of the Visualizer to switch between the Visualizer image and the computer image.

There is no need to use a second remote control of a projector or monitor to switch between the image sources.

Digital Scaler



The Visualizer has a built-in digital image scaler which can process the signal from the external input and output it in the same mode as the Visualizer image. (For example: If the Visualizer is set to output an SXGA image to the projector and the computer outputs an XGA signal, the scaler of the Visualizer converts the XGA image of the computer to SXGA. As a result the projector does not readjust the input mode when switching between the Visualizer and computer image). It can also digitize the analog RGB signal from the computer and output it on the digital DVI output. In addition, images on a connected USB-stick are automatically scaled to the current output mode of the Visualizer.

Anti-theft Devices



The Visualizer has two anti-theft devices.

On the bottom of the working plate (in the center of the turntable) is a thread for attaching the unit to a table with the supplied table lock bolt. T-Lock (Kensington® Lock) devices can also be used. The connection can be found on the bottom of the arm.

Integrated Seamless Switch



The VZ-9plus³ comes with an integrated Seamless Switch.

This allows fade-over/dissolve effects when switching between the Visualizer image, the image from the external input, the internal image memory of the Visualizer and pictures on an USB stick.

This feature makes switching from one media to the other appear very smooth and professional.

Live to Freeze Comparison



The DVI and RGB outputs of the Visualizer can be set to output different signals. One of them can always output the live image of the Visualizer's camera, while the other one can be set to output a "freeze" image.

This can be used for a "Live Picture to Freeze Picture Comparison" on two monitors or screens with just one Visualizer.

While one monitor or screen displays a "freeze" image that can be used for comparison, another monitor or screen can be used for presenting the live image from the Visualizer.

External Controlling



The Visualizer offers 4 different possibilities to control the unit from external devices, such as a remote control system for the whole room, a video conferencing system or a computer: Serial RS232, USB, LAN and Infrared

Enhanced RS232/LAN/USB-Protocol

The Enhanced Protocol of the VZ-9plus³ supports the same professional commands over the RS232, LAN and USB port. Thus the units support all of today's and tomorrows external controlling devices.



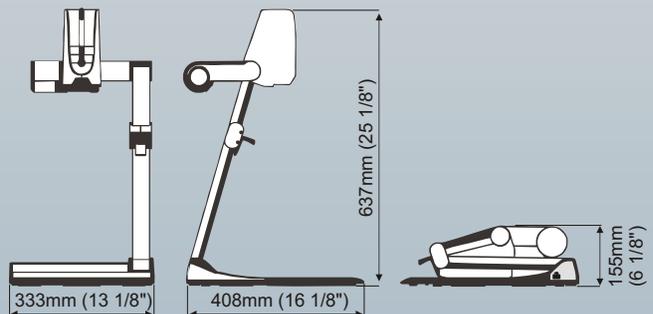
Lightfield for Slides



The VZ-9plus³ has a built-in lightfield for slides.

It is situated on top of the working surface, just beside the LCD monitor.

Connectors and Dimensions



Technical Data

Camera	1-CCD 1/3" Progressive Scan
Pictures per second (as picked up by the camera)	30 frames (in all resolutions)
Effective Pixel (=pixels actually used for image information)	1280 x 960 (=1,228,800)
Total pixels of CCD(s)	1,320,000
Pixels processed per second (=effective pixels x frames per second)	36,864,000
Color reproduction / precision	very good colors (sRGB color precision)
Native signal output	SXGA- (1280x960) and WXGA (1280x800) and 720p HD (1280x720)
Converted output signals (4:3 and 5:4)	UXGA (1600x1200), SXGA+ (1360x1024), SXGA (1280x1024), XGA (1024x768), SVGA (800x600)
Converted Widescreen output signals (16:9 and 16:10)	WUXGA (1920x1200), 1080p HD (1920x1080), WSXGA+ (1680x1050), WXGA+ (1440x900), WXGA (1360x768)
Resolution (measured)	820 lines
Resolution in Image Turn mode	1050 lines
Image Rotation	90, 180 and 270 degrees
Iris and White Balance	automatic and manual
Autofocus / Speed	yes (continuously working, high speed)
Manual focus	yes
Shutter	auto, manual, flickerless
Easy positioning of objects with "Synchronized Lasermarkers"	yes (with marks for 4:3 and 16:10 aspect ratio)
Built-in LCD preview monitor	yes (70x45mm / 2.7"x1.8")
Live to Freeze comparison (on two monitors or screens with just one Visualizer)	yes (RGB and DVI output can output different signals. One can output a live image and the other one a "freeze" image)
On screen menu with on screen help	yes
Firmware Updates via	USB, RS232, LAN
Zoom / Lens	64 x zoom (16x optical + 4x digital), zoom wheel with multiple speed
Max object height on working surface	230mm (9.6") in tele position 370mm (15") in wide position
Max. pick-up area on working surface	length: 300mm (11.81"), width: 400 mm (15.75")
Max. pick-up area on working surface in Image Turn mode	length: 400mm (15.75"), width: 300 mm (11.81")
Min. pick-up area on working surface (in full resolution, with optical zoom)	25 x 19 mm (0.98" x 0.75")
Min. pick-up area on working surface (with digital zoom)	6 x 4,5 mm (0.23" x 0.16")
Max. pick-up area outside of working surface	unlimited
Depth of focus on small object (42 x 33 mm)	10mm (0.4")
Depth of focus on large object (360 x 270 mm)	260mm (10.2")
Tilt range of camera	290° (110° to speaker + 180° to audience)
Blinding of audience or speaker	none
Light source	long life halogen spot light with aligned facet mirror, vertical rotation 270 degrees, lamp lifetime 5000 hours 50W, 12V
Connectivity Software (USB/LAN), for controlling, image and video capturing and firmware updates	included (for 32- and 64-bit Windows and Macintosh, Twain/WIA compatible, with video capture driver)
Reflection free area on working surface	whole working surface
Recordings outside of the working surface	yes (to the back and to the front of the unit)
Automatic image flip	yes (for recordings to the front of the unit)
Turntable mounted (for horizontal pan shots outside of the working surface)	yes
Intelligent folding system	articulated arm, 1-step set up
User programmable presets	3 (plus 8 fixed presets through RS232)
Special working surface for transparencies	yes
Slide pick-up	through integrated slide lightfield
External computer input / Input switch	yes (15-pin D-Sub/VGA plug)
Built-in digital scaler for the computer input	yes (processes the signal from computer input for RGB- and DVI-output)
Seamless switch with fading effects	yes
Image memory	9 pictures in internal memory + unlimited number on USB stick
9 image split-screen ("View function")	yes
Alternative Image display	Text enhancer / negative image / negative-blue image / black and white image
RGB output	one (15-pin D-Sub/VGA-plug)
DVI output	DVI-I (digital and analog)
HDMI output	when using a DVI-HDMI cable
USB standard / port	USB 2.0 Device Port and two USB Host Ports
Ethernet/LAN port, IP-addressable	yes, 10/100 Mbps
Additional network features: multicast and singlecast streaming, authentication	yes
RS232 port	9-pin D-Sub
Advanced controlling with professional protocol via RS232, LAN and USB	yes
Weight	6,5 kg (14,3 lbs)
Infrared remote control	yes (with laserpointer)
Anti-theft device	T-Lock (Kensington® Lock) and table lock bolt
Power (external power pack)	multi range 100-240 V, 80W weight: 0.3kg (0.6lbs)
Carrying case / dust cover	carrying case and dust cover included
Warranty	3 years

All units made in the European Union (Austria)

Design and specifications subject to change!

Your WolfVision dealer:



More information at:
www.wolfvision.com

Head office: WolfVision GmbH, Klaus/Austria
 USA distribution: WolfVision Inc, Duluth (Atlanta)
 WolfVision Inc, Burlingame (San Francisco)
 Asia distribution: WolfVision Asia, Singapore
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