

## VZ-C12<sup>3</sup> and VZ-C32<sup>3</sup> Visualizer Systems



# Driving the Creation of Knowledge

VZ-C12<sup>3</sup> and VZ-C32<sup>3</sup> Ceiling Visualizer Systems

WolfVision is a worldwide provider of products and services to leading universities, businesses, schools, and other organizations. An acknowledged 'technology leader' in the Visualizer and presentation solutions market, WolfVision is the company that takes the lead, setting standards worldwide for innovative, reliable, user-friendly, high performance presentation solutions.

WolfVision VZ-C12<sup>3</sup> and VZ-C32<sup>3</sup> Visualizer systems can either be integrated into a suspended ceiling, or mounted onto the ceiling just like a projector. The speaker's table or lecturn is kept clear, so that nothing obstructs the view between the speaker and the audience during a presentation, and objects to be displayed can be easily moved around the entire tabletop. A synchronized lightfield shines onto the desk, highlighting the pick-up area of the camera, showing exactly where to place display materials.



Our extensive knowledge and expertise across all application sectors enables us to offer comprehensive consultative guidance on customized combinations of Visualizer and camera hardware, software, and accessories, which enhance communication, collaboration, and knowledge sharing across all environments. As part of each individual ✓Solution we offer not only pre-sales advice, but also post-sales support, training and service, ensuring that you receive maximum benefit from your investment.

Driving the Creation of Knowledge. Since 1966.



++ Video ++

## Our Vision

When you've got something to say, we believe it is important that getting your message across and making an impact should be as easy as possible.

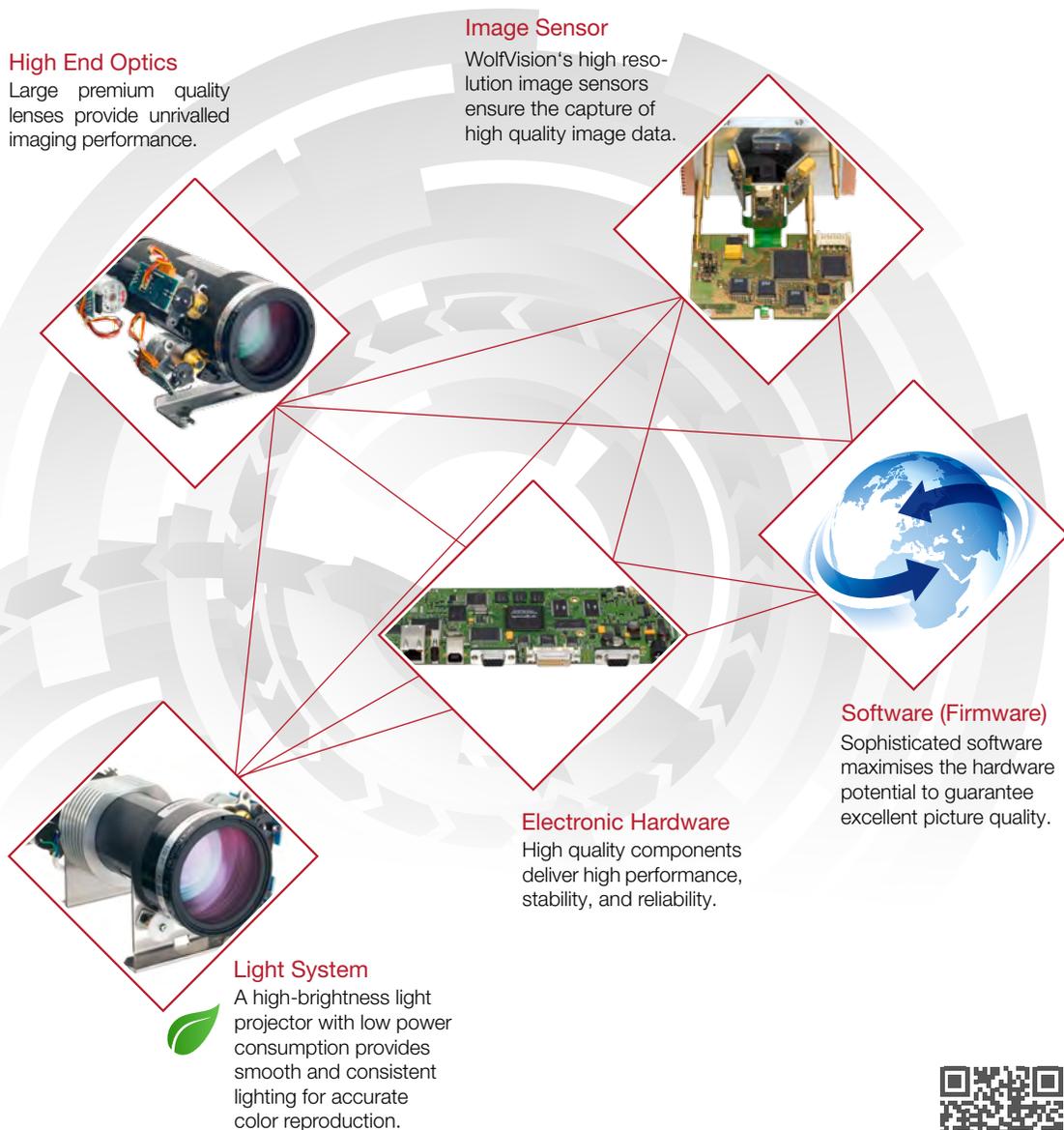
Our aim is to help you to explain it better, to give you the freedom to share your knowledge and collaborate with others - however you want, and whenever you want, when your audience is in the same room or on the other side of the world.

**Because knowledge matters -  
to all of us.**



# High Performance Imaging

WolfVision Visualizers are well-known for their unrivalled imaging quality, which is due to the perfect combination of high quality components and remarkable expertise. Our systems deliver high resolution throughout the entire picture, true-to-life colors, and consistently high frame rates to ensure smoothness of motion. They have fast and accurate autofocus and zooming, giving high quality dependable results every time! High end lenses provide distortion-free images, and high tech lighting systems deliver smooth and consistent lighting without distracting reflections or hot spots.



++ Video ++

# Key Features

## Flexible Installation

Ceiling Visualizers can be either mounted on the ceiling, or integrated into a suspended ceiling. To suspend the Visualizer from the ceiling (in order to get bigger enlargements), any standard ceiling mount for projectors can be used. The automatic height adjustment mode facilitates easy installation, and also offers the possibility to expand the optical zoom range if a height adjustable table or ceiling mount is used.

## Plenum Rating

The Ceiling Visualizer Series design and material adheres to all fire safety regulations and allows for quick installation into any ceiling. Both the VZ-C12<sup>3</sup> and VZ-C32<sup>3</sup> are plenum rated.

## Large Zoom Range

These Ceiling Visualizers come with powerful telezoom lenses with 16x optical zoom factor. In combination with the 4x digital zoom, the total zoom range of the Ceiling Visualizers is 64x. WolfVision telezoom lenses ensure maximum suitability for installation in a wide variety of rooms with different heights.



## Powerful HD Cameras

The difference between the two Ceiling Visualizers is the built-in camera. The VZ-C12<sup>3</sup> comes with a 1-CCD native 720p HD/SXGA-/WXGA camera with 820 lines resolution, while the VZ-C32<sup>3</sup> features a 3-CCD native 720pHD/SXGA-/WXGA camera with 1200 lines resolution and 100% color accuracy.

## Internal Image Memory

9 images can be stored and then recalled by simply pressing one of the numerical keys on the remote control. By pressing the „View All“ key, a split image with all 9 pictures of the memory can be displayed, enabling easy selection.

## High Depth of Focus

The Visualizer telezoom lenses have a very high depth of focus. Even at high magnification, when working with larger objects, images are always sharp from top to bottom.

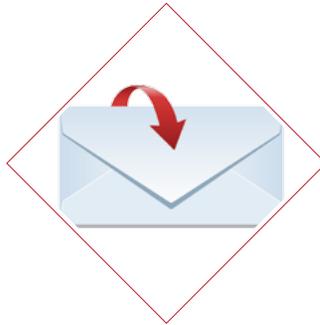


# Flexible Connectivity Options



## Efficient Knowledge Transfer via Streaming

VZ-C12<sup>3</sup> and VZ-C32<sup>3</sup> Visualizer systems or connected WolfVision vSolution Link software can stream video to computers, tablets or smartphones on the internal network or the internet using Motion JPEG mode. An external device receiving the Visualizer's stream can also be used as a control monitor.



## Quick and Convenient Distribution

WolfVision offers several possibilities for taking snapshots and emailing or printing them using our software components. This facilitates quick and easy distribution of materials during a presentation when required.



## Effective External Controlling

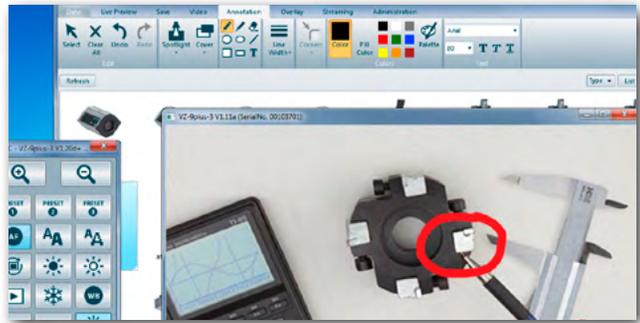
A wide range of connectivity options ensures that effective external controlling of the Visualizer is possible. Serial RS232, USB, LAN, and Infrared connections can be used to control these Visualizer systems from external devices such as a room control or videoconferencing system or a computer.



# Transforming Presentations

## ✓Solution Link for PC and Mac

vSolution Link allows a user to connect a computer directly to a Visualizer. The software allows for saving, printing and emailing of images, recording of videos, adding annotations and video streaming. It also provides useful tools for automatically applying Visualizer firmware updates, which helps to extend the life of your investment, and allows new features and technical improvements to be added at no cost!



## ✓Solution Control for Smartphones

The WolfVision vSolution Control App enables the Visualizer systems to connect to an iPhone, Windows 8, Windows Phone 8 or Android device via WLAN. This intuitive and easy to use app allows presenters to use the device keypad and Live Image Preview to control a presentation or lecture wirelessly from anywhere in the room.



# User-Friendly Operation

## Synchronized Lightfield - For Easier Positioning of Objects

A light projector inside the unit projects a lightfield the same size as the pick-up area of the built-in camera onto the working surface. The lens of the light projector and the camera are synchronized so that when zooming in and out, the size of this lightfield changes accordingly. The illuminated part of the working surface is always identical to the pick-up area of the camera. So a user always knows exactly where to place objects or documents.



## Powerful Illumination of complex 3-Dimensional objects

Due to the special light system of the Ceiling Visualizers, every part of the recorded picture is always perfectly illuminated. Hollow objects or complex 3-dimensional

objects are always completely illuminated - even on the inside. There is never any need to adjust the light.



Illuminated on the inside

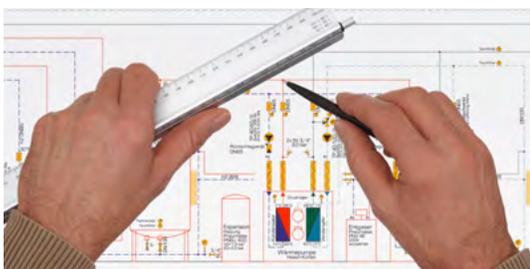


Not illuminated on the inside

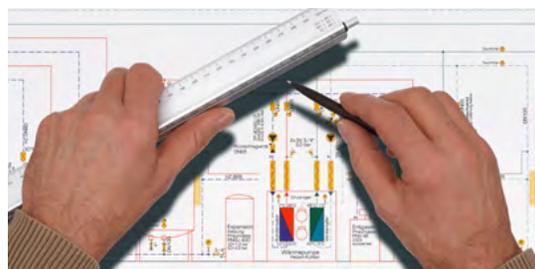
## Shadow-Free Images

As the camera and the light projector are situated side by side within the Visualizer, shadows are almost completely eliminated. During a presentation, it is often necessary to write on a document on the working surface or to

point to a certain detail with a finger or a pencil. Ceiling Visualizers are perfectly suited for this, as there are practically no shadows created, that might otherwise cover up important information.



Shadow-free



With shadows

# Ideal for Videoconferencing and Telepresence

The great advantage of a Ceiling Visualizer system in a videoconferencing or telepresence application is that it is completely invisible to the participants.



++ Video ++

# Technical Data

	VZ-C12 <sup>3</sup>	VZ-C32 <sup>3</sup>
Camera	1-CCD 1/3" Progressive Scan	3-CCD 1/3" Progressive Scan
Pictures per second (as picked up by the camera)	30 frames (in all resolutions)	
Effective Pixel	1280 x 960 (=1,228,800)	3 x 1280 x 960 (=3,686,400)
Total pixels of CCD(s)	1,320,000	3,960,000
Pixels processed per second	36,864,000	110,592,000
Color reproduction / precision	very good colors (sRGB color precision)	100% lifelike colors (sRGB color precision)
Native signal output	SXGA- (1280x960), WXGA (1280x800) and 720p HD (1280x720)	
Converted output signals (4:3 and 5:4)	UXGA (1600x1200), SXGA+ (1400x1050), 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	1200 lines
Resolution in Image Turn mode	1050 lines	1550 lines
Image Rotation	90, 180 and 270 degrees	
Iris and White balance adjustment	automatic and manual	
Autofocus	one-push-autofocus (focusing is rarely necessary due to high depth of focus)	
Manual focus	yes	
Synchronized lightfield (for easy positioning of objects)	yes (in size of pick-up area of camera) with 4:3 / 16:10 switching	
Text Enhancer	yes	
Live to Freeze comparison (on two monitors or screens with just one Visualizer)	yes (RGB, DVI and Preview outputs can output different signals. One can output a live image and another one a "freeze" image)	
On screen menu with Help	yes	
Firmware Updates via	USB, RS232, LAN, USB stick	
Zoom / Lens	two telezoom lenses, 64x zoom (16x optical + 4x digital)	
Max object height on working surface	no limit	
Max. pick-up area on working surface	depending on installation height	
Min. pick-up area on working	depending on installation height	
Depth of focus on small object (42 x 33 mm)	larger than 70mm (2.75")	
Depth of focus on large object (360 x 270 mm)	larger than 250mm (9.7")	
Shadow free illumination	yes	
Illumination of hollow objects	yes	
Light source	Maintenance free high-brightness LED light system (high light output, low power consumption), lamp lifetime: 30,000 hours	
vSolution Link software (USB/LAN, for controlling, image and video capturing and firmware updates)	included for 32- and 64-bit Windows + Macintosh, Twain/WIA compatible, with video capture driver	
Reflection free working surface	whole working plate	
User programmable presets	3 (+ 8 fixed presets through RS232, USB or LAN)	
Special working surface for transparencies	yes (special working plate included)	
Slide pick-up	with optional lightbox	
Bottom light	optional external lightboxes (large models like WolfVision's LB-38 can be used)	
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	
Advanced keystone correction	yes	
Image memory (with "Show all" function / split-screen)	9 pictures in internal memory + unlimited number on USB stick	
Alternative Image display	negative, negative-blue and black/white image	
RGB output	two (2x 15-pin D-Sub/VGA-plug)	
DVI output (HDMI compatible via adapter or cable)	DVI-I (digital and analog)	
USB standard / port	USB 2.0 Device Port and Host Port	
Ethernet/LAN port, IP-addressable	yes, 10/100 Mbps	
Additional LAN-features: multicast and singlecast (unicast) streaming, authentication	yes	
RS232 port	9-pin D-Sub	
Advanced controlling with professional protocol	yes - via RS232, LAN and USB	
Dimensions (L x W x H)	452mm x 352mm x 206mm (17.8" x 13.9" x 8.1")	
Weight	12 kg (25 lbs)	
Infrared remote control	yes, internal and external receiver (with 10 m cable and status LED)	
Anti-theft device	T-Lock (Kensington® Lock)	
Ceiling mount	included	
Power	Internal power supply, multi range 100-240 V, 65W, power consumption: 52W	
Warranty	5 years	

All units made in the European Union (Austria)

Design and specifications subject to change!

Your WolfVision Partner:



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