



# DRV-D1

DEEP REALITY VIEWER

Unique ergonomic digital stereo  
3D full high definition viewer



**Industry expertise includes:**

3D conceptual design and visualisation, Industrial computed tomography, Medical scanning and imaging, Engineering / Electrical / Architectural CAD, Building information modelling (BIM), Photogrammetry, Geospatial imaging, Gaming and Remote viewing.



# A NEW DIMENSION IN IMAGE PRESENTATION

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DRV-D1 is a unique, advanced, stereo image presentation system designed to provide fully interactive, real time, natural 3D visualisation with outstanding depth perception.

Vision Engineering's sustained investment in optical and digital R&D has resulted in the development of globally patented technology, TriTeQ<sup>3</sup>, to provide unparalleled and unique 3D imaging to users who require high resolution and ergonomic image presentation in real time with maximum depth perception.

TriTeQ<sup>3</sup> technology is at the heart of Vision Engineering's DRV-D1 display system.

## **Interactive 3D display in stereo full HD resolution**

In the era of increasingly sophisticated digital applications, image presentation is critical to improve the interpretation of 3D models and enhance the user experience.

In current design/visualisation packages, viewing options have serious limitations:

- 2D images on flat screen monitors, some with a quasi 3D option, resulting in lower resolution and significant processing requirements
- Stereo 3D monitors (lenticular or parallax barriers) with limited axial freedom and optical accommodation
- Require eyewear such as shutter or polarising glasses which create flicker and image cross talk
- VR goggles offering total immersion but with issues of coordination, balance and excluded subjects

DRV-D1 is the latest of many innovations over Vision Engineering's 60 years. TriTeQ<sup>3</sup> technology helps users in design, development, inspection and assembly to see subjects in a unique and extraordinary display, resulting in increased comfort, acuity, accuracy, productivity and efficiency.

### Key features

- Digital stereo 3D with vivid depth perception
- 4 million pixel image
- No glasses or headsets required
- Improved comfort and productivity
- Real time collaboration communication



# OUTSTANDING DEPTH PERCEPTION

DRV-D1 digital stereo 3D image provides a comfortable and natural view, with excellent subject clarity.

Excellent depth perception without the need to wear special glasses or headsets enables users to enjoy the three dimensional environment whilst retaining peripheral vision and sensory stimuli.

DRV-D1's ergonomic design enables good body posture and reduced fatigue, as the user sits upright, and makes genuine 3D detail accessible for all users.

DRV-D1 requires minimal setup, and is remarkably easy to use with familiar controls designed specifically for efficiency and comfort in the working environment. This means very little training is required, and full user benefits are achieved quickly.

- No glasses or headsets required
- Consistent light levels avoid eye strain
- Ergonomic and comfortable
- Freedom to wear prescription glasses or contact lenses
- Easy hand to eye coordination



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# NEW LEVELS OF COLLABORATION

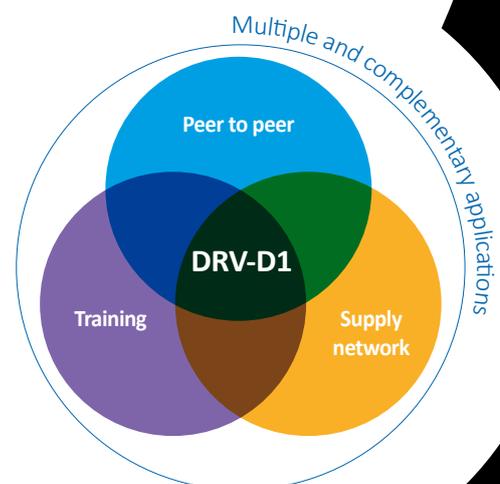
Not only is DRV-D1 a unique stereoscopic display technology, it also allows remote viewing, capture and sharing of exactly the same 3D images across networks in real time. This creates new opportunities for consultation and collaboration with remote personnel.

Digitally created models, scans, videos and photographs can be viewed in real-time at the same level of three dimensional detail between departments, specialists, customers, manufacturers, designers and suppliers across organisational or even international networks.

DRV-D1 enables faster and more accurate reporting, collaboration, consulting, diagnosing and supply approvals, contributing to faster, more informed decision making.

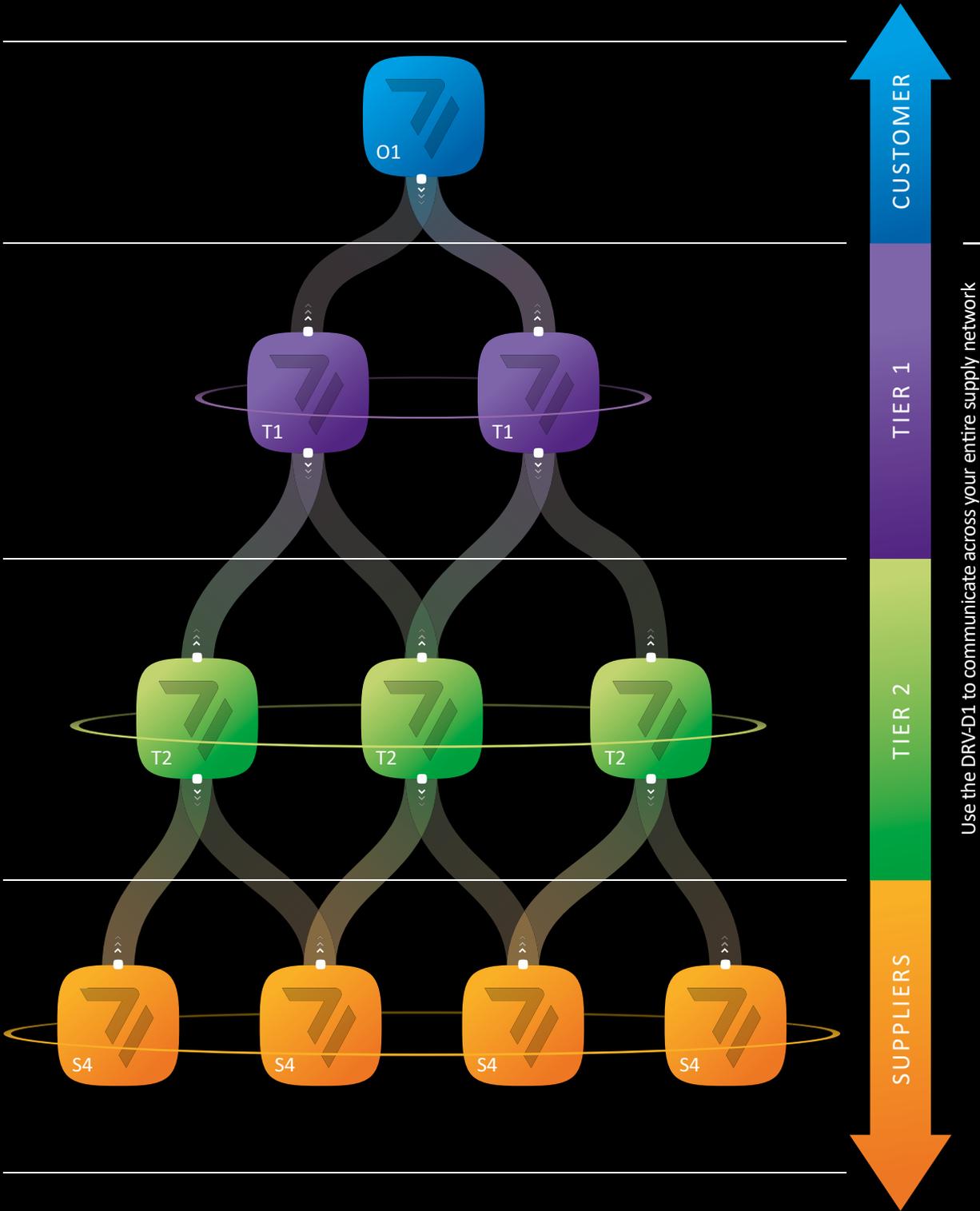
This level of detailed collaboration removes geographical barriers, enables innovative ways of working, and improves the efficiency and effectiveness of essential operational processes such as rapid prototyping and medical diagnoses.

DRV-D1 also accepts multiple inputs to support wide-ranging applications, including microscopes, cameras, CAD and MRI/CT scans, as well as immersive animations and architectural walk-throughs.



## Enhanced communication

DRV-D1's advanced connectivity allows users and observers to collaborate more effectively, and in real time. This supports clear and efficient communication throughout the supply network.



Designing in comfort and freedom of movement to enhance **operational efficiency** and promote accuracy



# WHY ERGONOMICS IS IMPORTANT

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Put simply, ergonomics is the science of designing environments and products to match the individuals who use them – improving comfort and productivity in the work setting.

Our design philosophy centres on user ergonomics. It includes providing adjustability to accommodate posture for users of all sizes. In addition, our products facilitate hand-to-eye co-ordination, improving operational efficiency and reducing error rates, and ultimately designing out the factors that can cause fatigue and longer-term occupational health issues.

We consider the individual's physiological interaction and sensory stimuli in three key areas:

## **Headgear free**

Vision TriTeQ's head-gear free digital technology maintains the operator's peripheral vision which overcomes issues of isolation, discomfort and disorientation whilst reducing short and longterm neck and back strain.

## **Interaction**

Many work environments require routine interaction with colleagues, tools, PC's or other media. Head freedom, full ambient sensory inputs and peripheral vision aids efficient interaction with people or tools.

## **A natural view of the subject**

DRV-D1's patented 3D viewing technology delivers a widescreen digital stereo 3D image which provides a natural stereo view irrespective of whether the user wears prescription glasses or not. Operators enjoy a vision that enables accurate visualisation and location of features, contours and space, critical for creating, reviewing and diagnosing three dimensional subjects.

## **Body posture**

Vision TriTeQ's designed-in ergonomics allows operators to sit comfortably at the viewer in a position that encourages correct body posture. The focal distance of the 3D image replicates the distance that most users position their 2D desk monitors and, being headgear free, the operator's eyes are governed by the ambient light which overcomes issues of eye fatigue.

# TECHNICAL INFORMATION

## DISPLAY HEAD

**Resolution** 1920 x 1080 per channel

**Image Size on concave mirror** 400 x 225mm in 16:9 aspect ratio

## INPUTS

**Power Supply** 100 - 240vac 50 / 60Hz

**2 x HDMI (Left and Right)** 1920 x 1080 @ ≤ 60 Hz

## OUTPUTS

**Image Capture** USB2

**Video Capture** HDMI cable to an external video capture card

**Connection to external mono monitor** HDMI 1920 x 1080

**Connection to second or multiple DRV-D1s** 2x HDMI daisy chain / wifi connection\*

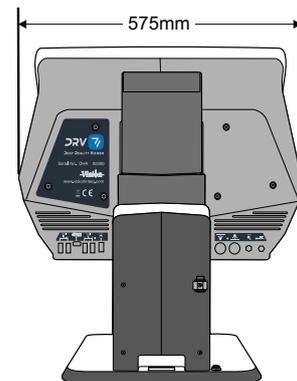
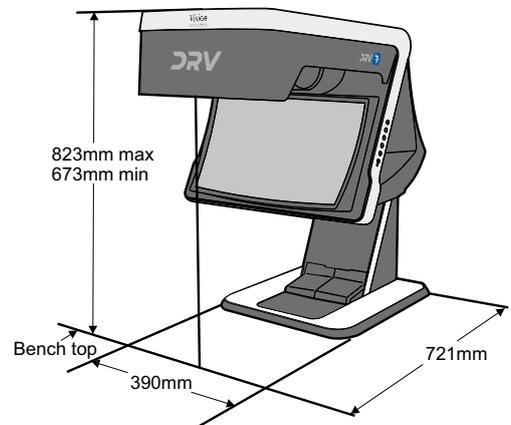
**Headphone Jack** 3.5mm

## STAND

**Counterbalanced stand with 150mm vertical travel**

\*Wifi requires additional 3rd party hardware

## DRV-D1

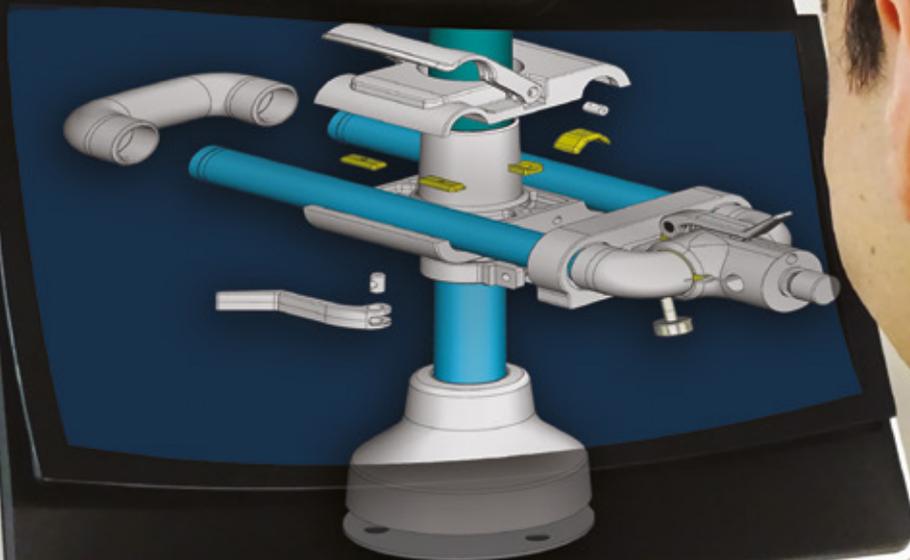




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# VISION ENGINEERING OUR DIFFERENCE

Vision Engineering Ltd. has been designing and manufacturing high quality ergonomic microscopes, digital instruments, inspection and non-contact measuring systems for over 60 years.

## Innovation

With a philosophy of design innovation, Vision Engineering holds world patents for a number of optical / digital techniques, significantly improving viewing ergonomics and enabling customer quality and productivity improvements.

To see our focused quality, please contact your Vision Engineering branch, local authorised distributor, or visit our website: [visioneng.com](http://visioneng.com)

## Quality

Vision Engineering prides itself on quality products, electronics, mechanics and optics and is certified for the quality management system ISO 9001:2015. Quality is as important to us as it is to our customers. Our systems have proved themselves many times over and are chosen by the world's leading companies.

## Global

Vision Engineering has manufacturing and design facilities in the UK and USA, plus sales and support offices throughout Europe, the Americas, the Far East, and Asia. We support our customers with close technical and service support anywhere in the world.

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Vision Engineering Ltd. has been certified for the quality management system ISO 9001:2015.

Sales Partner\*



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