

Why use EON Portable ICATCHER™?

EON Portable ICATCHER provides the most cost effective and easy to use stereoscopic 3D experience with set-up time of a few minutes on a **medium size display** with **front or rear projection**. Rather than just looking at a flat computer screen you are **immersed in the digital environment** and **objects float** in front of the screen. The capability to **interact within the environment** makes you a participant in the 3D application, not merely an observer.

"Ultimately, computer graphics is used as a form of communications and has applications in every discipline, business, and industry. Advances in science and commerce have often been led by inventions that allowed people to see old things in new ways or to see things for the first time. The visualization facilities and initiatives at Purdue will advance science and commerce in new and unimagined ways."

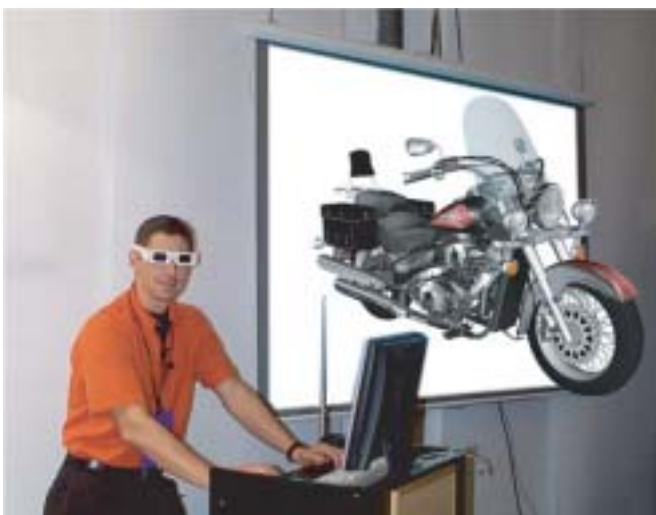
By implementing EON's technology in the Envision Center, we gain access to an easy to use development platform for both teaching and research that will allow us to seamlessly publish the 3D content to our diverse set of display formats."

*Professor Gary Bertoline
Associate Vice President for Information
Technology and Director of the Envision
Center at Purdue University*



Key Benefits

- **Fast set-up** that can be learned within minutes incl. projector alignment.
- **Low cost** high quality **stereoscopic 3D**.
- **Reliable** to set up and maintain.
- Heightened sense of **realism and immersion**.
- Multiple people can **share the stereo experience** and collaborate.
- **Superior image quality** with up to **SXGA (1280x1024)** compatible resolution.
- **View full scale of models** such as cars, buildings, machinery etc.
- **Sensory interaction** optional through the use of data gloves and motion tracking.
- **Perspective viewing** through passive stereoscopic technique.
- **Rear projection** and front projection included.
- Includes **all features** and functions of **EON ICATCHER** VR software authoring environment.



Easy, Fast, Reliable and Intuitive Real-Time Interaction

What is EON Portable ICATCHER™?

EON Portable ICATCHER is an **immersive stereoscopic turnkey display solution** that uses an EON exclusive integrated hardware solution only available through EON Reality. The system allows **intuitive, real-time interaction** with a **front or back projected screen** with realistic 3D imagery that is responsive to the user's actions and can display multiple objects or a full Virtual Reality environment.



Features

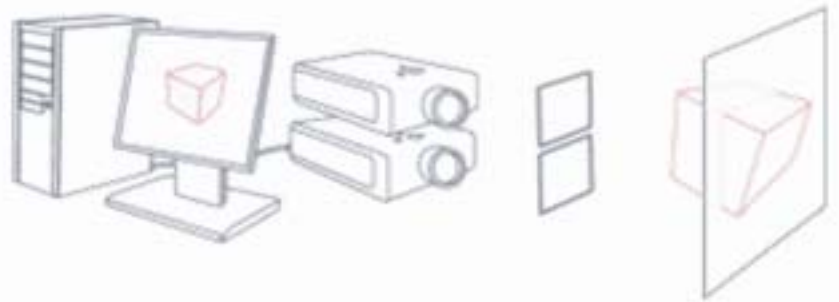
- **Fully integrated solution** with computer, projectors, filters etc. in one box.
- **Compatibility** with a wide range of Virtual Reality peripherals such as data gloves, Head Mounted Displays (HMD), motion tracking systems, joysticks etc.
- **Expands the scope and functionality** of a desktop or web based EON 3D application.
- **Cost effective** single or multi channel application via the use of cluster visualization, a proprietary EON technology that enables multi-channel display systems using ordinary PC's.
- **Fully mobile system** including sturdy rolling/shipping case.

How it Works

EON Portable ICATCHER System Overview

EON software is used to display an interactive 3D model from a standard CAD or 3D modeling software in Quadbuffer full resolution stereo mode. The Nvidia FX graphics cards converts the incoming stereo 3D signal to two monitor signals, one monitor signal for the right eye and one for the left eye. The signals are then routed to two LCD projectors, which are stacked and project images overlaid on top of each other.

To attain a 3D effect, a polarized filter is fitted in front of the lens on each projector, and the images are projected on a non-depolarizing soft silver 3D screen and are viewed through polarized 3D glasses. ICATCHER uses no mirrors to preserve brightness and provide an extremely robust system for novice as well as professional users.



EON ICATCHER Software

- Easy to use graphical authoring tool allowing non-programmers to add complex interactive effects.
- Easy import of most generic CAD and 3D formats, allowing easy use and manipulation of objects and textures from a wide range of 3D modeling tools.
- Pre-programmed interactive node functionality that minimizes development time for new applications.
- Graphical User Interface based web publisher that makes it easier to embed EON applications with rich communication to web pages.
- High rendering quality - EON offers a superb visual quality incl. support for lightmaps and anti-aliasing.
- Easily integrated with other standard software.
- Multi user environment, several people can share the experience and collaborate.
- Sensory interaction through the use of data gloves, motion tracking and force feedback devices.
- Perspective viewing control through stereoscopic software settings using high resolution Quadbuffer stereo.

